

Preliminary Expert Analysis and Cost Analysis Regarding the Construction Dispute between Mountain Construction Company and FirstMark Construction

Project: Contract No. 6982AF19C000013 dated 4/15/2019, for the construction of WY FLAP 6WX(1), Southfork Road Project

Project Location: Shoshone National Forest, Park County, Wyoming

Owner: Federal Highway Administration – Central Highway Division

General Contractor: Mountain Construction Company

Subcontractor: FirstMark Construction, LLC

Date: May 27, 2021

Report Prepared by Stephen Sullivan – Construction Analysis



Completed Ishawooa Bridge – South Fork Shoshone River – May 2021



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I. Introduction

By way of introduction, my name is Stephen Sullivan, I am the Owner of Construction Analysis, a construction claims consulting firm based out of Whitefish, Montana. Construction Analysis specializes in the preparation, analysis, and preparation of construction claims. I have been asked by Mountain Construction Company ("MCC"), through its attorney, Mr. Joseph Darrah, to render opinions as a construction claims expert, in the construction dispute involving the subcontract between MCC and its subcontractor, FirstMark Construction, LLC ("FM").

MCC was hired by the U.S. Department of Transportation, Federal Highway Administration - Central Federal Lands Highway Division ("FHWA") to perform road reconstruction and rehabilitation work of the South Fork Road southwest of Cody, Wyoming ("Project"). Part of MCC's work included removal and replacement of the EGF Bridge, referred to as the Ishawooa Bridge, that spanned the South Fork of the Shoshone River. FMC was subcontracted by MCC to perform the bridge work which is the subject of the dispute between MCC and FMC.

My experience as a construction claims consultant includes field work for numerous construction contractors involved in mining, rock crushing, power line, telephone line, gas line and residential construction. Since 1986, I have performed construction claims consulting work, first for a prominent Seattle, Washington law firm that specialized in construction law and since 1992 I have worked as an independent construction claims consultant (except for a period of employment as a Senior Project Consultant for Jacobs Associates in Seattle from October 2009 through January 2011).

During the last 35 years I have prepared over 100 + construction claims as well as provided analysis of additional cost requests, delays and schedules for contractors, subcontractors, developers, and owners. I have provided expert trial testimony in United States Federal Court in Houston, Texas and Gallatin County District Court in Bozeman, Montana. I have testified in 7 arbitrations and 3 California Department of Transportation Dispute Review Boards. I have been deposed on sixteen (16) occasions and participated in numerous mediations. For a more detailed outline of my experience, I have provided a recent copy of my Professional Resume along with the list of the Projects that I have worked on as *Exhibit 1* to this report.

Over the years, I have regularly attended various seminars and classes which have kept me updated on the recent methods for the evaluation of construction loss of productivity, performance of construction delay/schedule analysis and resolution of construction disputes. I have provided seminars to various construction companies and the Montana Chapter of Association of General Contractors (“MCA”) regarding the proper construction documentation and claims prevention practices. While I have not published any professional papers, I have researched and provided in-house papers to contractors regarding alternative extended overhead calculation methods and construction loss of productivity analysis methods. I have served as an associate member of the Montana Contractors Association.

In this matter, I have been asked to review the available legal papers, project documentation and construction contracts to evaluate and render an impartial and objective opinion regarding the following topics:

1. Analyze project contracts and project records regarding MCC and FMC’s work performance.
2. Render opinions regarding the responsibility for any impacts and delays that occurred on the Project.
3. Render opinions with respect to the construction contract(s) and the termination of FMC’s subcontract by MCC on the Project.
4. Render opinions regarding MCC and FMC claims and alleged damages.

Construction Analysis expressly reserves the right to supplement and/or revise this Preliminary Expert Report in the event further information is provided.

II. Reference Materials

1. General Contract Documents
2. Subcontract Documents
3. Project Correspondence & Documentation
 - Letters & Emails
 - Daily Reports
 - Project Schedules
 - Project Plans and specifications
 - Geotechnical Report

4. Legal Pleadings & Reports

- FMC Complaint
- MCC Answer and Counterclaim
- FMC Answer to Counterclaim and Third-Party Complaint
- MCC Responses to Interrogatories and Request for Admission
- MCC Requests for Production of Documents
- First Mark Expert Reports

5. Construction Claim Reference Materials

- Administration of Government Contracts 5th Edition - *Cibinic and Nash*
- How to Get Paid for Construction Changes – *Steven Pinnell*
- Construction Scheduling – Preparation, Liability and Claims – *Wickwire & Driscoll*

In addition to the review of documents and materials listed above, a site visit was performed on May 3, 2021.

III. Key Personnel

1. **FHWA – Owner & Designer**

- Sheri Walsh – Contracting Officer
- Micah Leadford – Project Manager/Construction Operations Engineer
- James Kerrigan – Project Manager
- Paul (Dusty) Escamilla – Project Engineer/Contracting Officer Representative (COR)
- Dustin Robbins, P.E. – FHWA Geotechnical Engineer
- Marilyn Dodsden, P.E. – FHWA Lead Geotechnical Engineer

2. **Park County, Wyoming – Public Works Department**

- Brian Edwards – Park County Engineer
- Ben McDonald – Park County Project Manager

3. **Mountain Construction – General Contractor**

- Stuart Frost –Director
- Michael Frost-Director
- Pat Kelton - Project Manager
- Danny May-General Manager

4. **FirstMark Construction - Subcontractor**

- Taj Mukadam – Vice President
- Tucker Rodgers
- Phil Martin – Division Manager
- Shan Nelson – Project Engineer
- Dan Zekonis – Project Engineer

IV. Project Location & Background

1. Project Location

The FHWA and Park County, Wyoming were the owners and primary sponsors for the project. The Southfork Highway accesses the national forest and several ranches and residences and is a major transportation route. The project is located roughly 25 miles southwest of Cody, Wyoming in Park County. The general location of the project is shown on the following map:

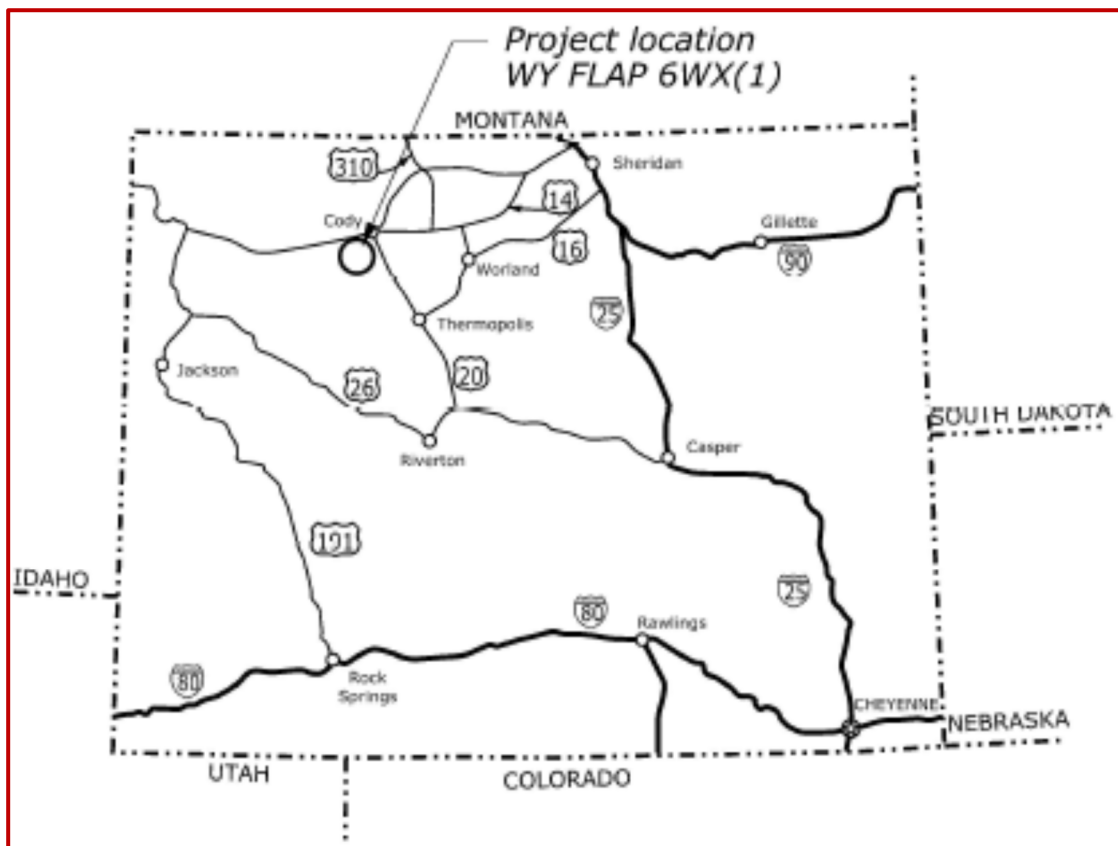


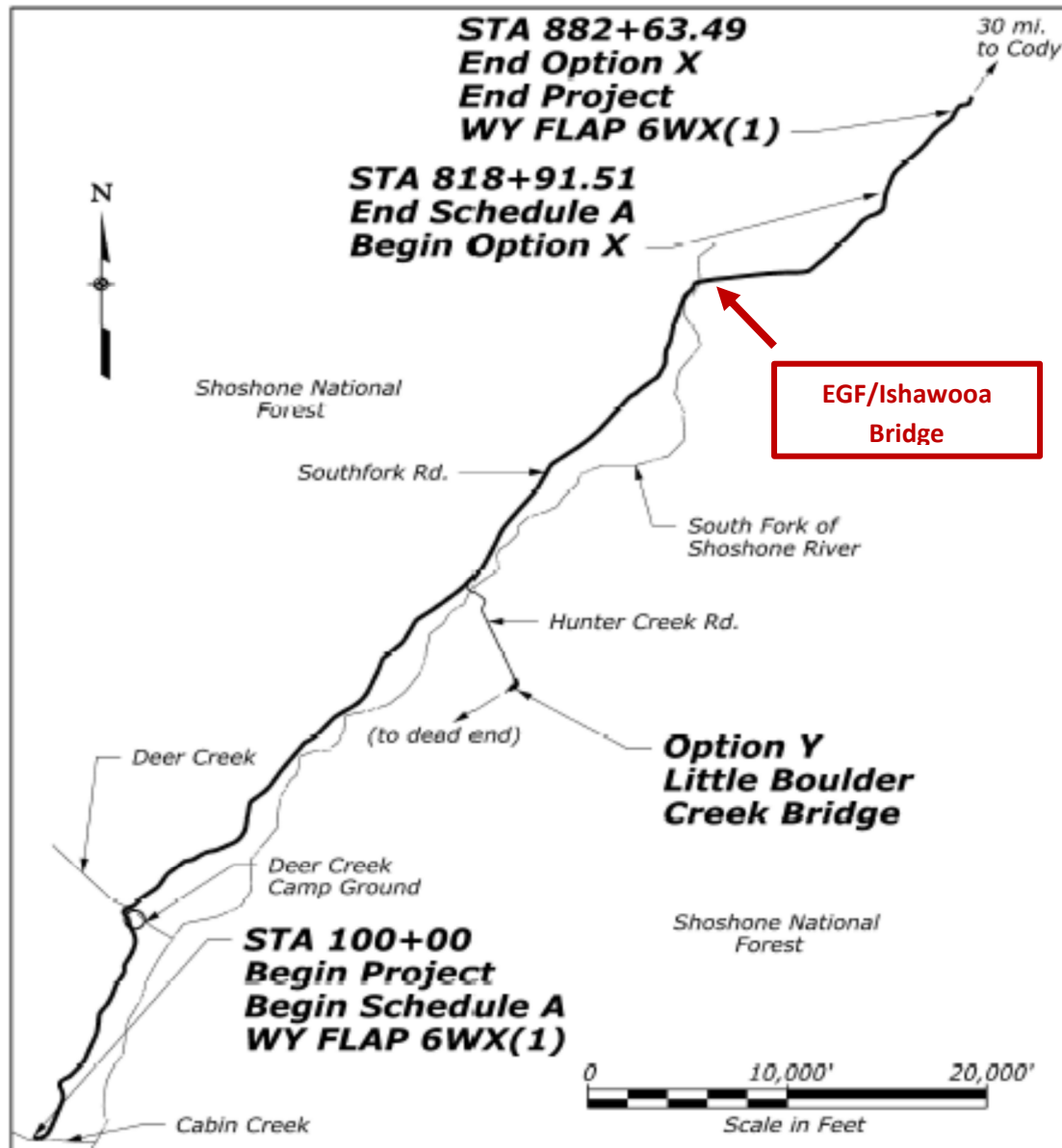
Plate 1 – General Project Location Map

The road follows the South Fork of the Shoshone River. The FHWA Website provides a general

The Southfork Road project was a widening/reconstruction, resurfacing, restoration, and rehabilitation (4R) and gravel resurfacing project in Park County, WY. The project is the southern 13 miles of the route, starting at the existing termini at the Cabin Creek Trailhead and extending northeast to Cody. The route is primarily used as recreational access to Shoshone National Forest, as well as agricultural and residential access along the route. The project was for a full-depth

reclamation of the pavement section (approximately 6 miles) and minor shoulder widening (2 feet) and re-graveling of the existing base segment (the southernmost 7 miles).¹

The project Plan Site Map shows the section of roadway to be rehabilitated and location of the EGF/Isahwooa Bridge:



The project Final Geotechnical Report dated December 2018 ("Geotech Report") explained the Project work that include bridge reconstruction:

¹ FHWA Southfork Road Website: <https://highways.dot.gov/federal-lands/projects/wy/southfork>

The work will take place between mileposts (MP) 27.8 and 42.7 along Park County Road 6WX Southfork Road and will consist of the following construction activities: construction of new asphalt pavement from MP 27.8 to 35.3, aggregate resurfacing from MP 35.3 to 42.7, the replacement of bridge EGF over South Fork Shoshone River, the replacement of the Little Boulder Creek bridge, drainage improvements, and minor alignment shifts to optimize road geometry.² *Emphasis Added*

The Geotech Report further explained the replacement of bridge EGF over South Fork Shoshone River was necessary due to scour evidence “particularly at the bridge center pier” and “erosion of upstream embankment near the west abutment.”³

To allow traffic to pass through the project during construction, the contract required the bridge to be constructed in 3 Phases. Phase 1 involved the construction of the north side of the bridge while traffic utilized the existing bridge. Phase 2 would switch traffic to the newly constructed Northside which would allow the demolition of the existing bridge and construction of the southside of the new bridge. Phase 3 involved the placement concrete deck connecting the completed Phase 1 and Phase 2 concrete decks.

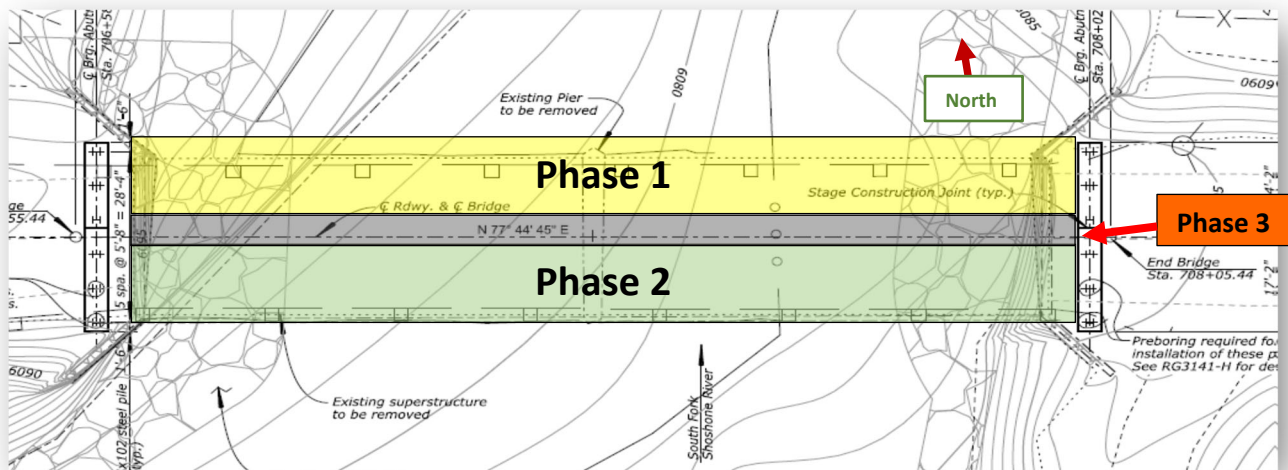


Plate 1 – Bridge Construction Phasing

² FHWA Final Geotechnical Report dated December 2018 – page 1

³ FHWA Final Geotechnical Report dated December 2018 – page 1

2. MCC Bid and Contract Award

On February 28, 2019, the FHWA issued Solicitation, Offer and Award for the Southfork [Shoshone River] Road ("Contract"); the contract bid date was March 29, 2019.⁴ The bids were opened on March 29, 2019, Mountain Construction and FirstMark were the only 2 bidders. Mountain Construction is a general contractor based out of Lovell, Wyoming. FirstMark is a contractor "with offices across the United States".⁵ It is understood that at the time of the bid, FirstMark had recently purchased CMG Construction of Billings, Montana. CMG was sold in February 2017 after its former president was convicted of federal corruption charges.⁶

MCC **\$13,472,628** bid was the lowest and FirstMark's bid was **\$13,909,000**.⁷

Immediately after the bid opening, FirstMark's representative approached MCC and offered to perform the bridge work as a subcontractor. Since FirstMark's price to perform the work was less than MCC price to self-perform the work, and because FirstMark's was a bridge construction specialist, MCC accepted FM's offer.

The Conformed Contract No. 6982AF19C000013 ("Contract") between MCC and FHWA was executed on April 15, 2019.⁸ Contract Page A-20 summarized the contract amounts:

Bid Schedule Summary

Schedule	Awarded Initially	Possibly Award Later
Schedule A - Base(Page A - 1)	\$11,768,344.88	
Schedule X - Option(Page A - 8)		\$1,189,385.63
Schedule Y - Option(Page A - 12)		\$514,895.10
Total - Schedules	\$11,768,344.88	\$1,704,280.73

Submitted By: Mountain Construction Company

Pursuant to the Contract MCC was required to complete all the work in 223 calendar days ("CDs"). The Notice to Proceed was issued on April 22, 2019 which stated:

⁴ Solicitation, Offer and Award – Solicitation No. 6982AF 198000004, Contract No. 6982AF19C000013 dated 2/28/2019

⁵ FirstMark Website: <https://www.firstmarkconstruction.com/>

⁶ Billings Gazette Article dated 2/24/17

⁷ Exhibit 1.1 - Bid Opening Summary dated 3/29/19

⁸ Contract No. 3559 – Stage 4 TSF Embankment Raise – Construction Contract

As stated in the contract, a project completion date for all work, excluding work required between STA 705+00 to 709+00, is October 31, 2019. The project completion date for the completion of all work is November 30, 2019.⁹

Pursuant to this requirement, MCC planned to complete the Project on November 30, 2019.

Preconstruction Meeting was held on April 30, 2019.¹⁰ Both MCC and FirstMark attended.

3. MCC's Baseline Schedule

After MCC executed the contract with the FHWA on April 15, 2019. In accordance with FHWA FP-14 Section 155.-*SCHEDULES FOR CONSTRUCTION CONTRACTS*, MCC prepared its initial Project Schedule Narrative & CPM Schedule ("Baseline"). FirstMark provided its initial schedule to MCC on April 30, 2019,¹¹ FirstMark schedule information was subsequently incorporated into MCC Baseline.

MCC submitted its Baseline on June 13, 2019. The Baseline was based upon 6-day work week that showed Substantial Completion occurring on October 14, 2019 and final completion on November 30, 2019.

The Baseline Schedule narrative broke MCC's work into 3 major work areas and showed construction work activities were planned to be performed between the following dates:

South Fork Road Sta. 100+00.00 to Sta. 487+70.00: Start 5/6/19 – Finish 10/30/19; Duration: 125 days

- *This phase is divided into 3 sub phases: from sta. 366 to sta. 487+70 then from sta.244+48 to Sta 366 and then from sta.100+00 to sta.244+48(deer creek)*
- *Comprises preliminary work, removal of fence, sign system and fertilizing, seeding on all phases.*
- *Road work including excavation, clearing, and grubbing, ditching excavation, and topsoil placement.*
- *Drainage including installation of pvc conduits and riprap.*

South Fork Road Sta. 487+70.00 to Sta. 818+91.51: Start 5/6/19 – Finish 11/30/19; Duration: 145 days

- *This phase is divided into 4 sub phases: from sta. 487+70 to sta. 596 then from sta. 596 to Sta 705 and then from sta.709 to sta.764 and then from Sta. 764 to Sta. 818.*
- *Comprises preliminary work, removal of fence, sign system and fertilizing, seeding on all phases.*
- *Road work including excavation, clearing, and grubbing, ditching excavation, and topsoil placement.*
- *Drainage including installation of pvc conduits and riprap.*

⁹ Exhibit 2 - FHWA Letter dated 4/22/19 – Notice to Proceed

¹⁰ Exhibit 3 – MCC Daily Report dated 4/30/19

¹¹ Exhibit 4 - FirstMark Schedule dated 4/30/19

Bridge Sta. 706+55.00 to Sta. 708+05.44: Start 5/14/19 – Finish 10/15/19; Duration: 106 days

- This phase is divided into 4 Stages: General stage, stage 1, stage 2, and stage 3. General stage includes clearing, grubbing, installation of barriers, mobilization of
- demolition and earthwork equipment.
- Stage 1 is for the left side that includes preliminary work, demolition, and construction
- of bridge and same for stage 2 but for the right side.
- Stage 3 includes demolition, center pier and removal of cofferdam.¹²

The Baseline showed the Project's critical path that ran through the South Fork Road Sta. 487+70.00 to Sta. 818+91.51 road work. With 32 days of float, FirstMark's planned bridge construction was not on the critical path. FirstMark's bridge work largely a separate work activity.

4. FirstMark Bridge Construction Bid Estimate, Subcontract and Schedule

FirstMark submitted EGF/Isahwooa Bridge pricing immediately after the contract bid opening on March 29, 2019, FirstMark offered a proposal to MCC to subcontract the bridge work. MCC accepted FirstMark's proposal and sent FirstMark a copy of the subcontract for signature on April 22, 2019. The total subcontract amount was **\$1,614,566**. The Subcontract stated in part:

THE SUBCONTRACTOR AGREES AS FOLLOWS:

I. To furnish, in strict accordance with the terms and conditions of the General Contract and at the unit prices hereinafter specified, all labor, material, supplies, tools, equipment and services including field measurements necessary to complete the portions of the work specified in paragraph I under the heading "The Contractor Agrees as follows", (b) to pay all costs in connection therewith as bills therefore become due; (c) to save harmless the Contractor, the Owner and the project for all claims and mechanics' liens on account thereof; and (d) to furnish to the Contractor, when and as often as requested, satisfactory evidence that he has complied with the preceding clause.

Bridge

II. To complete said work within the time or times specified, with the understanding that no extension of time will be recognized by the contractor without the written consent of the Contractor,

WORK TO BEGIN Per Schedule of Contract

WORK TO BE PERFORMED IN SUCH A MANNER AS TO NOT INTERFERE WITH OR DELAY THE PRIME CONTRACTOR SCHEDULE ANY LIQUIDATED DAMAGES RESULTING FROM SUBCONTRACTOR DELAYS WILL BE PAID BY THE SUBCONTRACTOR

.....

¹² Exhibit 5 - MCC Submittal-029 Project Schedule dated 6/13/19

*X. To be bound to the Contract by the terms of the General Contract, to conform to and comply with all of the terms of the General Contract and to assume toward the Contractor all the duties and obligations that the Contractor assumes in the General Contract toward the Owner in so far as they are applicable to this Subcontract.*¹³

FirstMark produced its schedule to perform the bridge work on April 30, 2019 and informed MCC that its submittal process would begin on May 9, 2019.¹⁴ Its schedule showed completion of the submittals would occur on May 30, 2019 and it would complete all the Structures Work on October 14, 2019.¹⁵

V. FirstMark Bridge Work Construction Delay/Impact Events and Expert Opinions

1. FirstMark Start Up Delays

A. Contract Execution Delay

MCC forwarded subcontract on April 22, 2019 expecting that FirstMark would promptly sign and return it to allow MCC to execute the contract. For reasons unexplained, FirstMark waited more than a month (May 28, 2019) to sign and return the contract. As a result, for 36 days there was no executed Subcontract in place. This occurred despite the fact FirstMark's April 30, 2019 Schedule showed it would perform its submittal process from April 26, 2019 to May 30, 2019.¹⁶ While some submittals were submitted by FirstMark during this period, FirstMark's failure to timely sign and return the contract documents was the first sign of FirstMark's future dilatory performance on the project.

FirstMark's April 30, 2019 Schedule also indicated it planned mobilize its equipment starting on June 1, 2019¹⁷ (the June 1, 2019 mob date was incorporated into MCC's June 13, 2019 Baseline Schedule). But for reasons unknown, FirstMark's mobilization was delayed for more than 3 weeks. On June 24, 2019, FirstMark informed MMC of its plan to move its pile hammer and crane, "We are planning on moving in our 336, Movax, pile hammer and crane mats Tuesday the 25th between noon and 3. They will be coming on 3 low boys."¹⁸ While the 25-day equipment mobilization delay was troubling, because the

¹³ Exhibit 6 - Mountain Construction Company – Standard Subcontract Agreement dated 4/22/19

¹⁴ Exhibit 7 - FirstMark – MCC email dated 5/9/19

¹⁵ Exhibit 8 - FirstMark April 30, 2019 Schedule

¹⁶ See Exhibit 8 - FirstMark April 30, 2019 Schedule

¹⁷ See Exhibit 8 - FirstMark April 30, 2019 Schedule

¹⁸ Exhibit 9 - FirstMark email dated 6/24/19

bridge work had 32 days of float (per the Baseline Schedule), the FirstMark mobilization delay did not impact the project critical path. *(See Section 4 – Delay/Schedule Analysis)*

It also apparent the FirstMark delayed equipment mobilization was overshadowed the concurrent delay caused by FirstMark's failure to provide adequate and complete submittals which contributed to FirstMark's start-up delays. FirstMark's submittal delays are discussed in the following report section.

B. First Mark Submittal Delays

Project records clearly show FirstMark mismanaged the submittal process. FirstMark's submittal delays, coupled with equipment mobilization issues, resulted in FirstMark falling substantially behind schedule before it even began its contract work.

To begin its bridge construction work FirstMark's Bridge Demolition and Shoring Plans needed to be approved by the FHWA. According to FirstMark's April 30, 2019 Schedule all submittals, including the Bridge Demolition, Shoring and Pile Driving were to be submitted and approved by May 30, 2019. FirstMark did not even come close to meeting its own May 30, 2019 submittal approval deadline:

- **Bridge Demolition Submittal Delay**

According to its own schedule, one of FirstMark's first items of work was Bridge Demolition, which was to start on June 1, 2019. FirstMark's did not submit its Bridge Demolition Plan until June 10, 2019.¹⁹ FHWA approved the submittal on June 28, 2019²⁰ – 28 days later planned.

- **Shoring Plan Submittal Delay**

FirstMark's April 30, 2019 Schedule told MCC to FirstMark expected approval of its Shoring Plan Submittal on May 30, 2019. FirstMark did not even start putting its preliminary Shoring Plan together until July 10, 2019. After MCC submitted FirstMark's plan on July 13, 2019, the FHWA found that, "A subsequent review showed the submittal to be incomplete and therefore unable to be satisfactorily reviewed. Therefore, we are returning for correction."²¹ FirstMark made corrections and resubmitted the plan on July 22, 2019 and the FHWA approved the submittal on July 23, 2019.²² As result of the prolonged submittal process, the shoring plan approval was 54 days late.

¹⁹ Exhibit 10 - FirstMark – MCC Email dated 6/10/19

²⁰ Exhibit 11 - MCC email dated 6/28/19

²¹ Exhibit 12 - FirstMark – MCC Email dated 7/17/19

²² Exhibit 13 - FHWA Letter of Transmittal dated 7/23/19

As a result of the ongoing problems with incomplete submittals and delays on July 16, 2019, MCC superintendent, Pat Kelton told FirstMark of his concerns regarding its failure to manage submittals:

I am concerned that you seem to be missing many of the required submittals that are spelled out in the FP 14. These are required 30 days prior to the start of work, and you are headed to installation of the pile in the near future.²³

This email was followed by a 2nd MCC email dated 7/20/19, with Mr. Kelton telling FirstMark “You need to be more specific”, and:

This is a requirement of submittals, so far Dusty [FHWA] has been generous in accepting generalized section submittals but he can stop at any time and reject the submittals.

They have 30 days to review per the specs and if rejected the clock starts again, so making sure they are correct the first time is time well spent.

Also, one specification per submittal is best, keeps everything clear.

Please redo your submittal page indicating exactly what required specification you are intending this to meet.

FirstMark’s April 30, 2019 schedule indicated that FirstMark would mobilize on June 1, 2019 and start its pile driving operation on June 15, 2019. Due to FirstMark’s incomplete and delayed submittals processing, along with the delay equipment mobilization, start of the pile driving operation delayed to July 29, 2019 – a 45-day delay. At this point FirstMark had used up the 32 days of float for the bridge work shown in MCC Baseline Schedule. As a result, FirstMark’s bridge work became a critical item of work before it even started work. FirstMark was or should been aware of since MCC’s project schedules were available and posted in the MCC jobsite trailer.

On July 26, 2019 FirstMark’s superintendent, Shane Nelson, apparently unaware of that MCC’s project schedule was posted at the job trailer, asked for a copy of MCC’s project schedule:

Would I be able to get a copy of your south fork master schedule? I would like to see where we sit compared to the critical path and if there are any foreseeable conflicts in the future.²⁴

Emphasis Added

Mr. Nelson’s request indicates that FirstMark was aware that FirstMark’s bridge work had become the critical project activity. Pursuant to FirstMark’s request, MCC immediately provided its Baseline Schedule. Mr. Kelton also informed MCC, “I am in the middle of doing the update, please review this and

²³ Exhibit 14 - MCC email dated 7/16/19

²⁴ Exhibit 15 - FirstMark – MCC Emails date 7/26/19

then send me your new full schedule.”²⁵ After receiving MCC baseline on July 26, 2019, FirstMark provided an updated schedule July 29, 2019. Despite the 45-day start-up delay, FirstMark’s schedule update showed it planned complete its work on October 31, 2019.²⁶

Afterwards, when MCC produced its September 2, 2019 Schedule Update No. 1 on, as a result FirstMark’s late crane mobilization, pile driving delays, wall removal delays and more submittal delays that occurred during August 2019, MMC’s September 2, 2019 Update showed FirstMark’s Bridgework was critical and the completion of FirstMark’s bridge work was 28 days behind schedule and the bridge completion date was pushed out to December 5, 2019.²⁷

Comment re VERTEX Report: *FM’s expert, Mr. McConnell, in his April 16, 2021 report titled Review of MCC’s Termination of FM, completely ignores the FirstMark mobilization/submittal delays that occurred from April 2019 to end of July 2019.*

On page 8 of his report, Mr. McConnell begins his analysis as if FirstMark the mobilization/ submittal delays never happened and FirstMark was supposed to start at end of July 2019. As a result, Mr. McConnell failed to account for the FirstMark- caused delays that occurred between April and June 2019 effectively ignoring the fact that FirstMark was originally scheduled to start its construction work in early June 2019. This leaves one to believe FirstMark was supposed to start its work in late July 2019. By ignoring the FirstMark submittal delays, Mr. McConnell avoided having address the fact that FirstMark’s un-excusable delays had caused its bridge work to become a critical path project delay.

In my opinion, FirstMark’s mobilization/submittal delays, and the resulting bridge startup delay, was one of the key factors that led to and justified MCC’s eventual termination of FirstMark work. Mr. McConnell’s failure to shine a light on FirstMark’s initial submittal delays, which pushed the start FirstMark’s pile driving work start date back roughly 2 months, makes Mr. McConnell’s conclusions one-sided and misleading.

2. FirstMark Pile Crane Mobilization Delay

FirstMark’s original schedule, dated April 30, 2019, showed FirstMark planned to mobilize its crane starting on June 1, 2019.²⁸ FP-14 contract *Section 551 – Driven Piles* required FirstMark’s submittal for equipment “At least 30 days before starting driven pile work”.²⁹ This made the FirstMark’s deadline to

²⁵ See Exhibit 15 - FirstMark – MCC Emails date 7/26/19

²⁶ Exhibit 16 - FirstMark Email and schedule dated 7/29/19

²⁷ Exhibit 17 - MCC Schedule Updated No. 1 dated 9/2/19

²⁸ See Exhibit 8 - FirstMark Email and schedule dated 4/30/19

²⁹ FP-14 Section 551 – Driven Piles, Subsection 551.04 Submittal

submit its pile driving plan, including pile driving equipment, May 1, 2019. FirstMark did not even come close to meeting this deadline.

Problems with late delivery of FirstMark's crane started in mid-July when FirstMark told MMC that its crane would be late:

Apparently, the trucks mobilizing our crane got turned back to their yard in Massachusetts due to improper heavy load permitting. It looks to be not until the 31st that our crane shows up on site, but we are currently working on a plan to get a crane company down here from billings to assist with this problem. **We should not be affected schedule wise, but I wanted to keep you in the loop.**³⁰

At this point FirstMark's submittal delays and problems were already impacting the schedule.

FirstMark waited until July 22, 2019 to submitted it Pile Driving Plan that included SK's pile hammer review/wave equation analysis that include the proposed use a Movaz Hydraulic Hammer.³¹ FHWA had 30 days to approve the submittal, which could have pushed out the start of the pile driving work out to August 22, 2019. FHWA quickly approved the submittal on July 27, 2019.³² But FirstMark had already abandon its pile driving equipment plans.

Instead of providing only the approved Movaz Hammer, on July 24, 2019, FirstMark submitted a Request for Information ("RFI") proposing the use of a vibratory hammer to drive the piles the first 30 feet:

FirstMark construction would like to drive the first 30' of the test pile for Southfork road with a vibratory pile driver. This would leave roughly 10' of driving with the impact hammer we have submitted on. Based off the past experiences of the geotechnical engineer we have contracted to perform our dynamic load testing this should not affect the results of the test pile.³³ *Emphasis Added*

On July 27, 2019, the FWHA conditionally approved the use of the vibratory hammer, but approval was conditioned:

It will be acceptable to use a vibratory hammer to begin driving the foundation piles. However, the piles may only be installed to the Q200 scour elevation of 6067.7 as shown on plan sheet S3 with

³⁰ Exhibit 18 - FirstMark Email and Late Crane Arrival dated 7/18/19

³¹ Exhibit 19 - FirstMark Email and Pile Driving Plan dated 7/22/19

³² Exhibit 20 - MCC mail dated 7/27/19

³³ Exhibit 21 - FirstMark email and RFI No. 6 dated 7/24/19

the vibratory hammer. The remainder of the pile must be driven in accordance with the approved pile driving plan.³⁴ *Emphasis Added*

With its proposal, FirstMark effectively changed its planned operation from using one pile driver to two different pieces of equipment to drive the same piles. FirstMark's proposal would necessarily cause it to incur additional cost and delays by:

- Increasing time and cost by adding a 2nd equipment mob/demob
- Adding time to switch out 2 different of pile driving equipment
- Increasing time due to loss of productivity caused by changing the pile driving operations

For these reasons, FirstMark's proposal "to drive the first 30' of the test pile for Southfork road with a vibratory pile driver" left the remaining pile driving to another impact hammer. Planning to use 2 hammers made little sense - unless the vibratory hammer was the only hammer FirstMark had available.

Whatever the reasons, FirstMark's last-minute equipment change to add a 2nd pile driver was a last-minute change which would only cause further problems and added to delays that FirstMark had already caused. As a result of this decision FMC would have to incur cost of mobilizing a 2nd piece of equipment to drive piles to depths beyond the 30 LNFT to the minimum 40-foot pile depth.

Comment re VERTEX Report: *FM's expert, Mr. McConnell, in his April 16, 2021 report - page 25, Mr. McConnell confirmed it was FirstMark who made the proposal to use two pile drivers stating, "FirstMark proposed the use of a vibratory hammer to partially install the 44 ft of pile to scour depth pf 20 ft, and then use the Movac hammer for the remaining work". Mr. McConnell failed to mention that FirstMark's proposal was to use the vibratory hammer only for the first 30 ft and that FirstMark plan required two mobilizations, the cost to perform the 2nd mobilization is a cost FirstMark would later claim was additional costs.*

³⁴ See Exhibit 20 - MCC mail dated 7/27/19

3. FirstMark Pile Driving Differing Site Claim and Delay

A. Chronology and Analysis of Pile Driving Claim Events

One of FirstMark's first items of work was the pile driving work. Contract Standard Specification *FP-14 - Subsection 551.08 - Driven Pile Capacity* states:

Drive piles to the specified penetration and to the depth necessary to obtain the required nominal pile capacity. Splice piles not obtaining the required nominal capacity at the ordered length, and drive with an impact hammer until the required nominal pile capacity is achieved

The test pile work was a paid as separate work item; the "Dynamic Pile Load Tests" work involved the driving 2 test piles, one test at each abutment. Contract Standard Specification *FP-14 - Section 551.17 Test Piles* states, "Drive test piles to the required nominal capacity at the estimated tip elevation." The obvious purpose of driving test piles is to determine the actual pile driving depth necessary to achieve the required Nominal Pile Driving Resistance measured in KIPS/Pile, which is determined by performing a Pile Driving Analysis "PDA".

PDA tests determine the depth of the piles by the blow count per foot required for a specific hammer. On this project Plan sheet S3 "Foundation Table", shown below, told the contractor 435 kips/pile was required at Abutment No. 1 and 415 kips/pile at Abutment No. 2.

FOUNDATION TABLE

Location	Max Factored Pile Axial Load	Nominal Pile Driving Resistance req'd. (R _{ndr})	Min. Pile Tip Elev.
Abut. 1	230 kips/pile (Strength I)	435 kips/pile	El. 6047.00
Abut. 2	230 kips/pile (Strength I)	415 kips/pile	El. 6045.00

Contract Item A0780 – Steel H-Pile, 14x102, In-Place indicates that the FHWA estimated the total length of pile would 500 lineal feet ("LNFT") which works out to an estimated 40 LNFT for 12 H-Piles.

FirstMark's estimate cost to drive each LNFT was \$130. If the length of pile exceeded the estimated units, it would be paid the \$130 price for the increased LNFT.

To prepare its bid estimate for the pile driving work FirstMark was required to review all the contract documents – FP-14 Standard Specifications, Special Contract Specifications ("SCRs"), plans and referenced documents. The above table included on *Plan Sheet S3* provided the principal data needed to

estimate pile length. The *Final Geotechnical Report* (“Geotech Report”) was provided to offer “additional geotechnical information”.³⁵

FirstMark’s subcontract required it to provide “all labor, material, supplies, tools, equipment and services including field measurements necessary”³⁶ to complete the bridge work. As in any construction contract, it is up to the contractor to review all available contract documents to determine the resources - labor, equipment, materials, etc. - needed to successfully complete the contract work.

In my experience with civil and bridge construction projects, due to the inherent uncertainties involved with underground conditions, most Geotech Reports warn the contractor to expect potential variances in the information provided. As would be expected, the Geotech Report on this project included the following statement:

The subsurface explorations and tests described in the Subsurface Investigation Section on Procedures and Results have been conducted in accordance with standard practices and procedures (except as specifically noted). **The results of these explorations and tests represent conditions at the specific locations indicated subsurface conditions between these locations may vary.** The Analysis and Recommendations Section in this report include interpretations and recommendations developed by the Government in the process of preparing the design. **These interpretations are not intended m, a substitute for the personal investigation. independent interpretation. and judgment of the Contractor.**³⁷ *Emphasis Added*

Most experienced owners and contractors know the information contained geotechnical reports is limited since underground conditions depicted in the Geotech Report may or may not match actual conditions. Consequently, pile driving contracts, including this contract, often require the contract to drive test piles to determine the actual depth of the piles necessary to meet load requirements, which on this this project was 435 kips/pile at Abutment No. 1 and 415 kips/pile at Abutment No. 2.

As an experienced bridge contractor, FirstMark must have known it would be risky to rely on a Geotech Report as the primary source of information to prepare a bid estimate. FirstMark knew, or should have known, that if it used the Geotech Report as the primary basis to calculate its bid estimate, it should

³⁵ SOUTHFORK ROAD PARK COUNTY, \VY WY 6WX(I) Final Geotechnical Report - WY-FLAP-6WX (I)- 18-01 - South Fork Road Plan - page S3

³⁶ See *Exhibit 6* - MCC – FirstMark Standard Subcontract Agreement dated 4/22/19

³⁷ SOUTHFORK ROAD PARK COUNTY, \VY WY 6WX(I) Final Geotechnical Report - WY-FLAP-6WX (I)- 18-01, page 14

include a contingency to account for possibility that pile depth could exceed the depth calculated by relying on a Geotech Report. In other words, FirstMark should have planned to mobilize and utilize equipment capable to drive pile well beyond the 44 LNFT depth it estimated,³⁸ especially when the contract required test piles to determine the final depth.

These contract specification shows even if the required kips are achieved at a shorter pile length, the pile must still be driven to the minimum tip depth of 40 feet. More importantly, the foundation table gives the NOMINAL PILE DRIVING RESISTANCE REQUIRED-- which is 435 kips for abutment 1 and 415 kips for Abutment included *Pay Item A0800 – Dynamic Pile Load Test*. The driving of 2 test piles determines how deep the remaining production piles need to be driven to meet the nominal pile resistance contract requirements.

As discussed in the previous section, at the time started its pile driving work, FirstMark was significantly behind schedule. For reasons unknown, FirstMark must not have had adequate equipment available to drive pile beyond 44 LNFT, but apparently the vibratory hammer was available. The first test pile at Abutment No. 1 was driven on July 31, 2019. It did not meet the 435 kips/pile requirement at the 40' depth FirstMark anticipated; according to the CMG July 31, 2019 Daily Report submitted by FirstMark, it was noted, "Pile went to **specified minimum tip** elevation and almost gained a quarter of the resistance needed" ³⁹ Despite information provided that 40 LNFT was the minimum pile depth, FirstMark Immediately claimed there was differing site condition because the pile depth exceeded 40 LNFT, and submitted a notice letter:

Here is our written notice on differing site conditions concerning the pile driving and estimated pile tip elevation. At the estimated tip elevation, we had an average of 98 kips of resistance at the estimated tip elevation. ⁴⁰

But FirstMark notice was based up its misreading of the contract and Geotech Report; somehow FirstMark had confused minimum with maximum. Page 8 of the Geotech Report states the pile length was expected to reach a minimum 40 LNFT. 40 LNFT was not maximum that FirstMark should have expected:

³⁸ See *Exhibit 19* - FirstMark Email and Pile Driving Plan dated 7/22/19

³⁹ Exhibit 22 - FirstMark email w/Daily Reports dated 8/22/19

⁴⁰ Exhibit 23 - FirstMark Email re Notice of Differing Site Condition dated 7/31/19

Preliminary results provided by the structural engineer indicate a minimum tip elevation of 6,047 and 6,045 feet for Abutments 1 and 2 respectively in all cases, **the piles should be driven at least the minimum tip elevation** [estimated pile length of 40 feet] **shown on the project.**⁴¹
Emphasis Added

After figuring out that the piles had to be driven beyond 40 LNFT, on July 31, 2019, FirstMark produced a pile splicing plan,⁴² arranged for the delivery of 60' piles⁴³ and started to make arrangements to get the necessary equipment and resources to drive pile to a depth past 40 LNFT.

On August 8, 2019, CMG wrote "Had welder come in and splices H pile and drove pile to 81[LNFT]"⁴⁴ and provided test reports.⁴⁵ On August 12, MCC told FirstMark that "the FHWA intends to continue with the installation of the H-Pile for the bridge foundation" and:

FirstMark should proceed with obtaining the specifications for the hammer you intend to use for the remainder of the installations so they may be submitted for review and approval.

.....

The tip depth achieved with the current hammer will not govern the depth of the remainder of the pile, even if this pile reaches required bearing capacity, the restrike will only serve to achieve acceptance of this single test pile. Going to a different hammer negates any future use of your current [vibratory] hammer.

It sounds like any future use of your vibratory hammer will not be allowed; they want you to use an impact hammer starting at foundation grade.⁴⁶

After receiving this information on August 13, 2019, FirstMark told FHWA and MCC that it would shut down the pile driving operation until the FHWA issued a written directive and a change order or request for proposal:

For us to continue with pile driving operations and for me to schedule SK geotechnical for tomorrow **we will need written direction from FHWA today in a reasonable amount of time** (by 12 is preferred). I am not trying to be difficult to work with, but we are starting to incur costs associated with the increased pile and we have had no written direction to this point, and I want to make sure we are covered.

⁴¹ SOUTHFORK ROAD PARK COUNTY, \VY WY 6WX(I) Final Geotechnical Report - WY-FLAP-6WX (I)- 18-01, page 14

⁴² Exhibit 24 - FirstMark email dated 8/1/19

⁴³ Exhibit 25 - FirstMark email dated 8/5/19

⁴⁴ See Exhibit 22 - FirstMark email w/Daily Reports dated 8/22/19 – CMG Daily Report dated 8/8/19

⁴⁵ Exhibit 26 - FirstMark email dated 8/8/19 w/test reports

⁴⁶ Exhibit 27 - MCC email dated 8/12/19

I would also like you to ask if this work, we have been doing and will continue to be doing will be compensated under the premise of a change order/rfp.⁴⁷

But MCC Project Daily Report dated August 13, 2019 reported that Shane Nelson backed off on his threat to stop work:

FirstMark did not have anyone onsite today. I had several conversations with Shane Nelson about the need to get the test piles finished. **He insisted on having written direction before proceeding. I argue that the contract and FP14 give the direction though completion of the two test piles. He agreed to have SK onsite tomorrow and restrike the abutment 1 test pile.**⁴⁸ *Emphasis Added*

It should be noted that FirstMark's initial threat to stop work was a violation of the contract. Consequently, the threat probably did not sit well with the FHWA. When FHWA responded to FirstMark's shutdown threat and notice by letter dated August 19, 2019, it informed FirstMark:

In accordance with Subsection 551.08 of the FP-14, it is the Government's expectation that piles be driven to the specified penetration and to the depth necessary to obtain the nominal pile capacity. In addition, piles not obtaining the required nominal capacity at the ordered length are to be spliced and driven with an impact hammer until the required nominal pile capacity is achieved.

In accordance with Subsection 551.05 (b), **it is also our expectation that pile-driving equipment be furnished that permits permanent piles to be driven with reasonable effort and to the required depths and resistance.** It is the Government's understanding that the original equipment proposed in the Pile Driving Plan submitted on July 22, 2019 was unable to drive the original estimated pile lengths. This generated RFI 016 submitted on July 24, 2019 requesting the use a vibratory hammer to install the first 30 feet of pile to accommodate the proposed equipment.

However, based on the results of the first test pile, the proposed pile driving equipment has proven not capable of complying with the terms of the contract and is therefore unacceptable. Please re-evaluate and resubmit the pile driving analysis and revised data for an alternative pile driver. This submittal is to be approved before use in accordance with Subsection 551.05. Furthermore, Subsection 551.06 states to furnish piles with sufficient length to obtain the required resistance. **Please be advised that the Government does not consider the additional lengths necessary to obtain the required resistance to be a change or that additional compensation is due for performing the work specified in the contract as mentioned above.**⁴⁹ *Emphasis Added*

After FHWA made it clear that it did not consider to the added pile depth to be a differing site condition and would not be issuing a contract modification, FirstMark responded on August 21, 2019:

Direction was later provided on how to proceed and resulted in a pile length of double the anticipated length. The substantial additional pile length required to achieve bearing capacity is due

⁴⁷ Exhibit 28 - FirstMark email dated 8/13/19

⁴⁸ Exhibit 29 - MCC Project Daily Report dated 8/13/19

⁴⁹ Exhibit 30 - MCC Email and FHWA letter dated 8/19/19

to differing subsurface conditions. The change in additional length will require different equipment to drive pile to the new elevation in order to achieve capacity.

The Final Geotechnical Report for Southfork Road dated December 2018 provides a Summary of Pile Design Recommendations in Table 4.2 (page 8). Footnote 3, "**Minimum tip elevations presented on the bridge plans indicate all piles must reach an elevation of 6,047 and 6,045 to satisfy load requirements for abutments 1 and 2, respectively.** The axial resistance is expected to be reached at elevations of 6,057 and 6,053 for abutments 1 and 2, respectively". The actual pile depths results are substantially different then the analysis provided in the geotechnical report, which we consider a change.⁵⁰

There were several problems with FirstMark's letter:

- 1) The FHWA had not directed FirstMark "on how to proceed," FHWA simply told it FirstMark was required to meet the contract specifications and it expected "... that piles be driven to the specified penetration and to the depth necessary to obtain the nominal pile capacity."⁵¹
- 2) Again, FirstMark did not seem to comprehend that 40+ +/- LNFT "minimum tip elevation" did not equate to the maximum tip elevation
- 3) FirstMark failed to provide the necessary backup documentation to support its claim

On August 22, 2019, FirstMark submitted RFI No.9 asking MCC & FHWA to "forward price the change in Pile Driving unit cost for furnishing and installing the HP14x102 per bid item A0780". FirstMark's request was based upon:

By using the results from the first dynamic load testing of production pile #1 at abutment #1 and extrapolating, there will be roughly 1,000 LF of pile to be driven (+/- 83.33' per pile). This would be 200% of the planned quantity of pile, well over the 115% specified in the FAR clauses (FAR clause 11.702).⁵²

FirstMark also forwarded RFI No. 10 requesting compensation for added pile splicing submitted because "FirstMark believed this a change to the plans and contract they were used to bid this project".⁵³

On August 20, 2019, FirstMark told MCC it had "located a hammer and pile leads" and was "tracking down a different crane to suspend the new hammer". A 2nd Revised Pile Driving Plan was submitted on

⁵⁰ Exhibit 31 - FirstMark email dated 8/26/19 and letter dated August 21, 2019

⁵¹ See Exhibit 30 - MCC Email and FHWA letter dated 8/19/19

⁵² Exhibit 32 - FirstMark Email and RFI # 9 dated 8/22/19

⁵³ Exhibit 33 - FirstMark Email and RFI # 10 dated 8/22/19

August 25, 2019, that identified Delmag D30-32 Diesel Pile Hammer (“Delmag Hammer”) as the hammer FirstMark would use and the FHWA approved Delmag Hammer on August 27, 2019.⁵⁴

On August 31, 2019 MCC told FirstMark it had not submitted FirstMark’s August 21, 2019 differing site letter to the FHWA explaining:

Currently, the FHWA has made their position clear that all work is currently within the specifications of the contract. If you wish to contest this, please provide the necessary submittals or RFIs along with backup to support your position.

They [FHWA] have not stated they will refuse to entertain extra costs, but they need backup.

FirstMark responded to MCC email on September 3, 2019 telling MCC that “The basis of change is the design criteria within in the geotech report which does not accurately depict the conditions present in the field as we referenced in our letter”, and it was compiling its costs and “. . . will submit our change request once we complete the pile work from Phase 1.”

MCC responded On September 3, 2019 telling FirstMark:

I acknowledge that you consider the extra pile length to be a change of conditions. As well, the FHWA is aware of your position.

Currently, the FHWA does not consider it to be a change of condition, but basically that is due to lack of any information being provided to them proving otherwise.

Their position is that the plans and Geotech report state “Minimum” pile length, not a firm pile depth. The necessary pile depth is to be determined by the two test piles, so they never stated a required pile depth, only that the pile is required to be driven to a depth that provides the required Nominal Driving Resistance. FAR Clause 52.211-18, Variation in Estimated Quantity allows that if actual quantity is ABOVE OR BELOW estimated quantity then either party may demand an equitable adjustment in contract price.

The pile appears to be headed to a 100% overrun in contract quantity, but not yet proven, so this clause may apply. However, care should be exercised in using this clause as the FHWA could request a reduction in the pile unit price citing economy of volume.⁵⁵ *Emphasis Added*

MCC also notified FirstMark that it needed to consider its own equipment delays problems:

. . . delays not caused by the inaccurate information, such as the one currently being experienced because your onsite crane is incapable of handling the diesel hammer and your crews are waiting on

⁵⁴ Exhibit 34 - FHWA Email dated 8/27/19

⁵⁵ Exhibit 35 - MCC & FirstMark emails dated 9/3/19

another crane, I suggest you document that as well so the time can be accurately separated so the issue is not clouded at a later date.⁵⁶ *Emphasis Added*

By this email, MCC correctly notified FirstMark of the status of its differing site condition claim, but before MCC could forward FirstMark's claim it had to submit backup information and documentation needed to meet the FHWA requirements to support a claim. FirstMark told MMC, "Thanks for the response and support. **We will separate the incurred time for the changes FirstMark owns**".⁵⁷ But when FirstMark eventually submitted its increased pile driving cost information in December 2019, there was no backup or indication to indicate that it had accounted for or separated any "incurred time for changes FirstMark owns"⁵⁸ as it had promised.

To complete the work, after "FirstMark had a permit issue which delayed the crane arrival",⁵⁹ FirstMark finally brought in a rental crane from Montana Crane Services on September 6, 2019. The crane was able to handle the Delmag Hammer needed to complete the work. After a suitable crane to handle the Demag hammer finally arrived, and according to its schedule submitted on November 6, 2019, FirstMark was able to complete the driving of 6 piles at Abutment Phase 1 Abut 1 on September 17, 2019 and Montana Crane Services demobilized.⁶⁰ Neither FirstMark, nor its experts, have ever explained why the Delmag Hammer and a Montana Crane Services crane were not brought to project in the first place.

After completing the pile driving work FirstMark continued pressed on with its differing site condition claim. In December 2019 FirstMark provided a compiled list of what appears was most of the pile driving cost it incurred from July 31, 2019 through September 17, 2019. The total amount of FirstMark Phase 1 pile driving post work pricing request \$307,792⁶¹, this total cost was broken down as follows:

⁵⁶ See Exhibit 35 - MCC & FirstMark emails dated 9/3/19

⁵⁷ See Exhibit 35 - MCC & FirstMark email dated 9/3/19

⁵⁸ Exhibit 36 - MCC Email dated 2/3/20 w/FirstMark cost calculations

⁵⁹ Exhibit 37 - MCC Email dated 9/6/19

⁶⁰ Exhibit 38 - First Mark TIA Schedule submitted on 12/2/19

⁶¹ See Exhibit 36 - MCC Email dated 2/3/20 w/FirstMark cost calculations

Totals	
Estimated Extra pile driving costs	\$ 68,758.46
Estimated splicing costs	\$ 14,185.72
Estimated stand-by Costs	\$ 67,707.74
Estimated Extended costs	\$ 64,155.00
Estimated Onsite Admin Costs	\$ 51,680.00
Total Estimated cost	\$ 266,486.92
Overhead estimated cost (5%)	\$ 13,324.35
Cost plus overhead	\$ 279,811.27
Mark-up (10%)	1.1
Total Estimated cost with mark up and overhead	\$ 307,792.39

After receiving FirstMark cost, MCC initially hesitated passing through the information because FirstMark did not provide an explanation or the required detailed backup of the charges it had included. There was also no backup or indication that shows FirstMark failed to account for delays it was responsible for, as it had earlier promised, "We will separate the incurred time for the changes FirstMark owns".⁶²

On February 3, 2020 MCC submitted FirstMark's calculations to the FHWA, telling the FHWA that:

Please see attached a notice from FirstMark Construction of "Estimated Extra Pile Costs" for the additional pile that was installed.

No backup for the charges was provided.

Please take this as Information Only and realize that it does not necessarily reflect the position of Mountain Construction Company at this time.⁶³

On February 5, 2020 MCC also told FirstMark's differing site claim was premature since FirstMark had completed only half of the pile driving work.

FirstMark responded on February 13, 2020, "we do not agree with your request to submit the additional costs under the "Variation in Estimated Quantities" or VEQ Clause. The FAR 52.211-18, VEQ is subordinate to other equitable remedies, such as the Changes or Differing Site Conditions (DSC) clauses."⁶⁴

⁶² See Exhibit 35 - MCC & FirstMark email dated 9/3/19

⁶³ See Exhibit 36 - MCC Email dated 2/3/20

⁶⁴ Exhibit 39 - FirstMark letter date 2/13/20

FHWA denied FirstMark's February 17, 2020 *Request for Repricing Due to Change Conditions* on February 21, 2020 writing:

However, there is no information or data to support FirstMark's position that the subsurface or latent physical conditions at the site differ materially from those indicated in this contract, or that unknown physical conditions at the site, of an unusual nature, differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract. Therefore, the Government is not able to confirm the alleged differing site condition.⁶⁵

FirstMark wrote a letter on February 26, 2019 disputing FHWA determination which it continues maintain to the present day.

As will be discussed in the following sections, MCC ended up completed the remaining Phase 2 work after the termination of FirstMark's subcontract on March 19, 2020. (*See Section 4 - Evaluation of FirstMark Default Termination*). FHWA paid FirstMark, and MCC, for the pile driving work each preformed per the VEQ clause.

Comment re VERTEX Report: *On page his report, Mr. McConnell wrongly accused MCC of acting in bad faith stating that MCC's "decision to not proposition the FHWA for the additional time and funds for the encountered Type 1 differing site condition was made in bad faith." As shown by the above noted correspondence, it is abundantly clear MCC timely informed FirstMark of the status of its differing site claim. In my view Mr. McConnell's accusation of bad faith is baseless.*

A. Conclusions Reached Regarding FirstMark Phase 1 Pile Driving Delay

Based upon the review of the project documents, it is important to keep in mind that by the time FirstMark brought in the vibratory hammer in late July 2019, its submittal delays had already caused it to be 2 months behind schedule, putting the bridge work on project critical path.

From the above analysis, a summary of the events and facts as well as conclusions have been reached:

- FirstMark's July 29, 2019 Schedule showed it expected to complete the *Drive Piles Phase 1* work in one (1) day. Each pile to an estimated 40 LNFT (6 piles a total 250 +/- LNFT)

⁶⁵ Exhibit 40 - MCC email dated 2/26/20 w/Attached FirstMark and FHWA Correspondence

- Before it started its work FirstMark decided to bring in a vibratory hammer to partially complete the work. The project delays associated with the pile driving were predominantly caused by FirstMark's difficulties in bringing the 2nd Crane/Hammer - not the alleged differing site condition.
- FirstMark's so-called "Time Impact Analysis" shows that from the completion of Activity A3005 - SPLICE AND DRIVE SECOND 22' ADDITION DYNAMIC LOAD TEST PILE ABUT 1 was completed on August 8, 2019. FirstMark did not mobilize the 2nd crane until Sept 4, 2019 - a 28-day delay caused by FirstMark's inability to provide a crane/pile driver needed to drive the production piles beyond 40 LNFT.
- As a result of FirstMark's inability to provide the correct equipment and resources to drive pile past 40 LNFT, it took FirstMark from July 31, 2019 to September 17, 2019 to complete Drive Piles Phase 1 work – 48 days.⁶⁶
- At the end of October 2019, MCC Pay Estimate Summary shows FirstMark was paid the subcontract price of \$20,000 to drive 2 test piles and was paid \$72,245 to drive 6 Phase 1 production piles to a total depth of 556.50 LNFT.⁶⁷
- FirstMark ended up driving the Phase 1 piles to a total depth of 556.50 LNFT, an additional 306.5 LNFT more than the estimated 250 LNFT.⁶⁸ The FHWA paid for the additional actual quantity of pile driven at the stated contract unit price as required by FP14-551.19.
- FirstMark and its experts argue the pile driving to the increased depth beyond the 40 LNFT that was estimated was differing site condition
- Based upon FirstMark estimated 250' in 1 day, had FirstMark had the correct equipment on site at the end of July 2019, FirstMark should have been able to drive the additional 306.5 LNF of pile in 1.5 days, thereby completing the pile driving on August 2, 2019
- As a result of FirstMark's decision to use the vibratory hammer to start the pile driving, the Phase 1 pile driving was not completed until September 17, 2019 - a 45.5 cd delay

In my opinion, even if it is found that the increased pile depth was caused by a differing site condition (it was not), 45.5 days of delay that occurred after July 31, 2019 would not have occurred had FirstMark brought in proper equipment in the first place. The piles driven by the Delmag Hammer/Montana Crane

⁶⁶ See Exhibit 38 - First Mark TIA Schedule submitted on 12/2/19

⁶⁷ Exhibit 41 - MCC Subcontract Estimate Report – Period 7/31/19 – 11/30/19

⁶⁸ Phase I Piles were ½ of the Subcontract Estimated 500 LNFT Total Pile Units

equipment meet the contract requirements so is logical to conclude that had the Delmag Hammer & Montana Crane been on-site to begin with the piles would have been driven in 2.5 +/- days.

Based on these events, as soon FirstMark realized the vibratory hammer was incapable of doing the work, it should have immediately planned to mobilize the correct equipment to complete the work. Instead, FirstMark denied responsibility, claiming there was a differing site condition and finally brought in the correct crane/hammer – something it should have done in the first place. The decision to bring in the vibratory hammer and FirstMark's prolonged struggle to bring the 2nd pile driving equipment to complete the work caused most of the additional 45.5 days of delay. In my view this delay, along with the previous submittal delays would have justified termination of FirstMark's subcontract in early September 2019. *See Section 4 - Evaluation of FirstMark Default Termination*

It seems like a strange coincidence that at the same time its last-minute vibratory hammer gamble backfired, FirstMark made its differing site condition claim. Inventing a differing site condition claim certainly offered a convenient way to whitewash the fact that FirstMark had mobilized the wrong type of equipment to complete the work. As an added plus, by claiming there was a differing site condition, FirstMark could get paid for the added cost and time to provide the 2nd crane and hammer – equipment it would have had to provide and pay for when it made the decision to bring in the vibratory hammer.

In my opinion, the evaluation of the events and facts surrounding FirstMark's differing site condition claim suggest FirstMark submitted a false claim to get paid for its own ill-advised decision to bring in the vibratory hammer. As an experienced contractor, FirstMark and its former CMG Construction personnel who worked for FirstMark, certainly had to know that submitting a false claim could lead to serious consequences, both contractual and criminal, especially in the federal contracting world.

Comment re VERTEX Report: *In the VEXTEX report, Mr. McConnell argues that FHWA or MCC should have dictated equipment requirements, "the Contract Documents do not require precautionary accommodations in equipment selection to account in unanticipated overages in pile driving, the FHWA or MCC should have clarified this in the bid documents".⁶⁹*

Mr. McConnell's hypothetical statement that "the FHWA or MCC should have clarified" the equipment selection statement is not only inaccurate and irrelevant – it is bizarre. First all, MCC did not prepare the

⁶⁹ VERTEX Review of MCC Termination of FirstMark – page 27

bid documents. Secondly, in my experience, most owners are not experts in “equipment selection” - contractors are the experts – so owners rarely take on the risk of specifying the type of equipment to use; obviously, this could lead to all sorts of issues if the owner-specified equipment did not work. Moreover, owners never pre-specify what equipment a contractor is to use in the event unanticipated conditions are encountered.

4. Continuing 2019 FirstMark Delays

After FirstMark completed the Phase 1 pile driving on September 17, 2019,⁷⁰ FirstMark proceed with the construction of the Phase 1 Abutments. On September 14, 2019 FirstMark submitted a 5-week look ahead schedule that showed Steel Erection Phase 1 work was to be performed from September 30 – October 1, 2019 and the completion of the Phase 1 Deck Pour on October 16, 2019.⁷¹ FirstMark schedule was optimistic. The FirstMark’s steel erector up did not show up until October 8, 2019, and the fabrication of the overhang work as not completed until October 10, 2019 - 6 days later than planned.⁷²

After the delayed completion of the structural steel work, the continuing delays pushed FirstMark’s into winter conditions. FirstMark submitted daily reports, titled “CMG Daily Reports”, dated 10/9/19 – 10/13/19 noted that FirstMark performed little work due to cold and wet conditions.⁷³ *(FirstMark apparently had not gone to the trouble of printing FirstMark Daily Report forms to replace the CMG Daily Report forms after it had purchased CMG in 2017.)*

Afterwards, FirstMark continued with concrete form work. During the fall of 2019, FirstMark’s construction delays were compounded by FirstMark continued failures to timely submit required paperwork. Examples of FirstMark’s management failures were noted on several occasions:

- **September 5, 2019 – MMC Email re Lack of FirstMark Daily Reports**

I [MCC] have not been seeing any [FirstMark] daily’s coming thru. **The Feds are starting to blow up over that to the point they are asking whether or not they should be paying you.**
Emphasis Added

- **September 16, 2019 – MCC Email re No Documentation of H-Pile Material Compliance**

I still have no documentation of material compliance and that First Mark is beginning the installation process.

⁷⁰ Exhibit 42 - FirstMark Email dated 9/28/19 with CMG Daily Report dated 9/17/19

⁷¹ Exhibit 43 - FirstMark Email with 5-Week Look Ahead Schedule dated 9/14/19

⁷² Exhibit 44 - FirstMark Email dated 10/18/19 with CMG Daily Report dated 10/8/19

⁷³ See Exhibit 44 - FirstMark Email dated 10/18/19 with CMG Daily Reports date 10/9/19 – 10/13/19

- **October 11, 2019 - MCC Email re FirstMark failure to provide Submittal Cover Sheet**

Please submit this with a FirstMark submittal cover sheet listing all the pertinent FP and / or SCR sections it is intended to meet.

- **October 16 & 17, 2019 – MCC and FirstMark emails re Failure to Provide Green Bar Certifications**

- *10/16/19 - First Mark: On the topic of the girders and bolts. I believe we provided all of the necessary paperwork. Just because Element was absentee for offload and erection (which everyone should have been aware were occurring) **should not force us to go above and beyond on rounding up extra paperwork.***
- *10/16/49 – MCC: **We can get real shitty on the notification issues if you want,** perhaps you shouldn't unload without verification?? Providing the certification paperwork required is your responsibility.*

Fact remains if you want paid you will provide the necessary paperwork.

They are quality control, their role is to verify only, not provide.

They have gone above and beyond their requirements in trying to help you get materials certified.

*They should only have to look at the paperwork and sign off. **You are not being required to provide any EXTRA paperwork, only the paperwork that should have been here before or during the offload.***

10/16/49 – MCC: Ok. If you need help with it let me know. No matter how it feels to you we are all trying to help assure everything gets certified so there is no future issue with getting payment.

Emphasis Added

- **November 4, 2019 – MCC Email re Incomplete Guard Rail Submittal**

1) The bridge guard rail came with no paperwork for the bolts and nuts, they were not even on the shipping manifest yet they were sent to site, from a materials management point of view this is causing some alarm bells as there is zero traceability.

2) Shane has mentioned as early as mid-last week that a new revision of the girder/structural steel letter was out to FirstMark **however I have not seen it yet and am beginning to get worried with the timeline for the pour if we till need some back and forth with the supplier.**

By these examples, FirstMark was repeatedly notified that its failures to provide the required paperwork was impacting delay the work. October 22, 2019 FirstMark was notified of FHWA's concerns:

One thing they [FHWA] made clear is they expect the bridge to be 100% complete this season [2019], no matter what it takes to deal with the cold weather.

Any extra days allowed for the road work will not apply to the bridge completion schedule. Please be sure your schedule update shows completion in 2019.

Exhibit November 30th, please prepare and submit along with backup as soon as possible so the FHWA can review.

A good faith plan and execution completing the bridge in 2019 may go a long way in avoiding LDs in 2019. Any fair-weather days not worked from here forward to completion will most assuredly be noted and considered by the FHWA when determining when and if LD's will be assessed.⁷⁴

On November 6, 2019, FirstMark submitted its TIA Schedule that incorporated added pile driving activities and delays. But the FirstMark's TIA analysis inaccurately represented that July 29, 2019 was the contract start date. FirstMark's originally scheduled construction start date was June 1, 2019. By revising the start date, FirstMark falsely represented that July 29, 2019 was its start date, which enable it to disregard the 61-day delay caused by its mobilization and submittal delays.

Comment re VERTEX Report: As noted previously, Mr. McConnell report also failed to account for FirstMark's initial 61-day mobilization/submittal delay.

With the change start date and added pile driving activities, FirstMark's so-called TIA Schedule showed it did not expect to complete its bridge work until January 30, 2019. This disregarded the FHWA's requirement to have the bridge "100% complete this season [2019], no matter what it takes."⁷⁵ FirstMark's deference to the FHWA's instruction probably did not sit well with the FHWA.

5. FirstMark's Girder Erection Debacle and Delay

The Phase 1 Deck Pour was completed on November 9, 2019.⁷⁶ On November 13, 2019, FHWA told MCC:

Based on the test results for the deck pour, it appears we have a failing air test which means we are not able to accept the concrete placed which is represented by that sample (30 yd3). I would expect that the low air was addressed during placement (more air added with a follow up test ran to ensure the mix met the requirements) but the test data does not reflect this. Your attention in addressing the discrepancy is appreciated.⁷⁷

⁷⁴ Exhibit 45 - MMC Email dated 10/22/19

⁷⁵ Exhibit 46- FirstMark Email and TIA Schedule dated 11/6/19

⁷⁶ Exhibit 47 - MMC Email and Form 470 – Notification of Completion of Work dated 11/9/19

⁷⁷ Exhibit 48 - FirstMark Email dated 11/13/19

Then on November 20, 2019, the failed deck pour tests were compounded when FirstMark found that its girders had twisted after the concrete pour. FirstMark wrote:

To follow up on our conversation we just had, we (FirstMark) have found that the bow in the edge of deck on the downriver side seems to be caused by rotation that has occurred on both girders A and B. Girders A and B have rotated in unison roughly 4" out of plumb at center span (clockwise if you are looking from abut 2 to abut 1). Also, closer to the bearing pads the girders could not rotate in unison so roughly the top half of the girders rotated (or bent) in the same direction for roughly 1".⁷⁸

FirstMark immediately stopped work on the project, ". . . will be discontinuing work on the actual bridge until we have signed documentation on the structural integrity of the current state of the bridge".⁷⁹ By unilaterally stopping its work and conditioning the resumption of work until it received documentation, FirstMark breached the contract in particular *FAR Clause 52.233-1 Disputes - Alternate 1* which states:

The Contractor shall proceed diligently with the performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the contracting officer.

Then FirstMark then admitted it did not submit the required girder erection plan before it set the girders:

Dusty [FHWA] was just down looking at the bridge and he mentioned he didn't have the girder erection plan. **This was my [Shane Nelson] fault as I must have overlooked getting this one sent off.**⁸⁰

FirstMark hurriedly provided Girder Erection Plan on November 21, 2019, but it was way too late to do any good.

After FirstMark's admission of negligence of not submitting the girder erection plan, by setting the girders without a plan FirstMark violated contract. *FP-14 104.03 Specifications and Drawings* required FirstMark to follow the requirements of *FAR Clause 52.236-21 Specifications and Drawings for Construction* that state:

General. Review and submit documents required to construct the work for accuracy, completeness, and compliance with the contract for approval by the CO. Documents submitted without evidence

⁷⁸ Exhibit 49 - FirstMark Email dated 11/20/19

⁷⁹ Exhibit 50 - FirstMark Email dated 11/21/19 rework shutdown

⁸⁰ Exhibit 51 - November 21, 2019 – FirstMark Email re No Girder Erection Plan

of Contractor approval may be returned for resubmission. Time for approval starts over when documents are returned for revision or if additional information is requested by the CO. **Do not perform work related to submitted documents or drawings before approval of the CO.** Obtain written approval before changing or deviating from the approved drawings. *Emphasis Added*

Had FirstMark timely submitted the Girder Erection Plan before it set the girders, the problems that followed would not have occurred because FHWA rejected plan on December 17, 2019. Among the 9 deficiencies listed was a notation No. 7 addressed the need for temporary bracing:

Show complete details for anticipated phases and erection conditions.” Many of these requirements including the sequence of erection are not provided in the submittal. The erection plan must show all stages of erection from field assembly of the girder through final placement of the stage 1 girders. This should include sequence of girder splice bolting and cross frame installation (555.18(d)) **and sequence of installing and removing the temporary bracing and binding details shown on the submittal.**⁸¹

It was also noted that “submittal does not bear the stamp and signature of a professional engineer proficient in steel girder erection as required by subsection 104.03(b)(2).” It is not hard to comprehend that FirstMark could have avoided the entire girder deformation debacle had it properly submitted its girder erection plan before – not after – it set the girders and formed and poured the concrete deck.

FirstMark’s problems were compounded on November 29, 2019 when Park County wrote:

The FHWA and Mountain Construction believe there was a problem with the cross bracing and/or can be done to remedy the situation. A worst-case scenario... the deck would need to be removed and the problem girder or girders would need to be replaced. They are also looking at whether or not the girder can be shimmed or pulled back into place. With the bowed deck and the possibility that the reinforcing steel has deformed or “yielded”, it is not looking good.

.....

Right now, all field work on the bridge has been stopped until a corrective action strategy can be developed. Mountain and the FHWA did confirm that they have a performance bond in place with FirstMark. By conditions of the contract, FirstMark must be given the opportunity to correct the matter. If they do not correct it and complete their work in a timely fashion, the bonding company will be notified, and a replacement sub-contractor may be brought in.⁸²

Instead of coming up with a corrective action plan, on December 2, 2019, FirstMark denied it was responsible for the girder problems, “FirstMark Construction has relied on the plans and specifications as provided but believe that the permanent design is insufficient, producing the results we have

⁸¹ Exhibit 52 - FHWA letter re Girder erection plan – Returned for Corrections dated 12/17/19

⁸² Exhibit 53 - Park County Email dated 11/29/19

today.”⁸³ This was not the first time FirstMark had found a way to deny responsibility for problems it created. (See previous section - Pile Driving Delays)

A meeting was held on December 6, 2018 to discuss corrective action to fix the girders and “identify next steps necessary to get the bridge work moving again with timelines for actions needed.”⁸⁴ By this time the FHWA began its investigation of the girder deflection problem by requesting information from FirstMark as part of its request. The FHWA asked FirstMark to provide:

A description of the means and methods used to provide temporary bracing or stiffening devices to accommodate handling stresses and to maintain alignment and camber required under Subsection 555.18(c).⁸⁵

After FirstMark provided its information, the FHWA performed its review and wrote its *Notice of Non-Compliance Regarding Stage 1 Bridge Construction* letter dated November 25, 2019 that stated in part:

It is the Government’s understanding that the falsework and forms for the concrete supported on the steel girders was not sufficiently constructed as necessary to prevent rotation of the exterior girders and potentially overstressing the girder’s web as required under Subsection 562.03.

In addition, it is the Governments understanding that the current girder and deck alignment for the Stage 1 construction indicate that **sufficient means and methods were not used to provide temporary bracing or stiffening devices to accommodate handling stresses and to maintain alignment and camber required under Subsection 555.18(c)**. This has caused issues with being able to maintain the survey tolerances . . .⁸⁶ *Emphasis Added*

The following FP-14 specifications are the ones referenced by the FHWA. These specifications clearly required FirstMark to install temporary bracing during the deck pour:

- **FP-14 Subsection - 562.03 Design.** Design temporary works that will support loads imposed and provide the necessary rigidity to produce the lines and grades shown in the plans for the final structure. Design temporary works according to the AASHTO, Load and Resistance Factor Design (LRFD) Bridge Design Specifications or AASHTO, Guide Design Specifications for Bridge Temporary Works. Ensure the design load on manufactured devices is within the load rating recommended by the manufacturer.

.....

Design falsework and forms for concrete supported on steel structures to ensure loads are applied to girder webs within 6 inches (150 millimeters) of a flange or stiffener. Distribute the

⁸³ Exhibit 54 - FirstMark Letter dated 12/2/19

⁸⁴ Exhibit 55 - MCC Email w/Meeting Minutes dated 12/6/19

⁸⁵ Exhibit 56 - MCC Email dated 11/29/19 with FHWA 10/28/19 letter

⁸⁶ Exhibit 57 - FirstMark Letter dated 11/25/19

loads in a manner that does not produce local distortion of the web. Brace or tie exterior girders, upon which overhanging bridge deck falsework brackets are hung, to the adjacent interior girders as necessary to prevent rotation of exterior girder web.

- **FP-14 Subsection 555.18 - (c) Erection procedures**

(1) Conformance to drawings. Erect according to approved drawings. Submit revised drawings and verification of stresses and geometry for modifications to or deviations from the approved erection procedure for approval.

(2) Erection stresses. Allow for erection stresses locked in the structure as a result of erection methods or equipment that differ from those previously approved. Provide additional material necessary to keep both temporary and final stresses within the allowable limits used in the design.

Provide temporary bracing or stiffening devices to accommodate handling stresses in individual members or segments.

(3) Maintaining alignment and camber. Support structural segments to produce the proper alignment and camber in the completed structure. Install cross frames and diagonal bracing during erection to provide stability and ensure correct geometry. Provide temporary bracing at any stage of erection. *Emphasis Added*

In addition to the above noted contract specifications, *Plan Sheet S2* included a note regarding structural steel installation, **"The contractor shall be responsible for the stability of the structure during all phases of construction."**

The plans and specifications are unambiguous. FirstMark was required to design, provide, and install temporary bracing to "produce alignment and camber in the completed structure."

The exact reason FirstMark failed to install temporary bracing boils down to two possibilities:

1. FirstMark forgot to install bracing. Given the fact that FirstMark continually neglected and had to be reminded to submit its daily reports and failed submit the Girder Erection Plan prior to setting Phase 1 girders and forming/pouring the Phase 1 deck, suggests that FirstMark's absent-mindedness and/or incompetent.
2. FirstMark decided to take a shortcut by leaving out temporary bracing. Considering that FirstMark was under pressure from FHWA and MCC to complete its work, it is likely it saw it could take a short cut not submitting the Girder Erection Plan and skipping the temporary bracing to save time and cost. But like FirstMark's vibratory hammer shortcut, FirstMark's skip the bracing short-cut backfired.

Whether FirstMark forgot to install or intentionally decided not to install the temporary bracing is immaterial – it was responsible for correcting the problem.

Incredibly, instead of admitting responsibility and moving forward to correct the problem, FirstMark continued to ignore the contract requirements and attempted to create the fiction that girder deflection was caused by defective plans and specifications. On December 11, 2019, FirstMark noticed that it began its defective design campaign on December 11, 2019:

Due to issues concerning permanent design, FirstMark Construction started experiencing time impacts starting on December 6th, 2019. This is after the FHWA directed FirstMark Construction to move forward with investigating the causes for the systematic buckling event as well as directing FirstMark Construction to move forward with seeking design assistance in a corrective action plan.⁸⁷

The FHWA, forwarded its *Non-Compliance Regarding Stage 1 Bridge Construction* letter on December 17, 2019:

The current state of Phase I bridge construction does not conform to the contract due to the inability to maintain the structure geometry and specified tolerances per contract requirements under *FP Section 555.18 Erection*. Per the *FP Section 106.01 Conformity with Contract Requirements*, FHWA requests that MCC propose and proceed with one of the following actions:

- Remove and replace the work that does not conform.
- Have work accepted at a reduced price; or
- Perform corrective measures to bring the work into conformity.

As discussed on tele-conference meetings, specific to the Phase I bridge construction, 12/6/19 and 12/11/19, and per *FP Section 106*, MCC will need to include supporting rationale and documentation to justify the proposal, from an engineering basis, and aid in a final disposition of the nonconforming work by the CO.⁸⁸

After this point FirstMark efforts to deny responsibility for problems and failures to correct those problems, would continue to delay the completion of the bridge work for the next 2 months:

- **January 14, 2020** - Park County voiced “serious concerns with the progress (or lack thereof) pertaining to the replacement of Bridge EGF” and “we are very concerned that we have seen no progress on the bridge in almost 2 months.”⁸⁹

⁸⁷ Exhibit 58- FirstMark Email and Notice dated 12/11/19

⁸⁸ Exhibit 59 - FHWA letter dated 12/17/19

⁸⁹ Exhibit 60 - Park County letter dated 1/15/20

- **January 14, 2020** – FHWA letter re girder erection plan returned a 2nd time for corrections, “Please address the evaluation of temporary bracing requirements to ensure allowable stresses are not exceeded.”⁹⁰
- **January 23, 2019** – MCC wrote, “You are removing the deck which should be complete today, then proceeding with the removal of the end walls and cleaning up the remaining concrete on the girders which is held by the Nelson studs.”⁹¹
- **January 24, 2020** – FirstMark wrote a lengthy letter that blamed its problems on the FHWA design that included a lengthy legal discussion about the Spearin doctrine, which concluded:

Subcontractor reserves all of its rights and remedies under its subcontract and under any rights and remedies implied under applicable law, specifically included the Owner’s implied warranty under the Spearin doctrine.⁹²

The referenced and lengthy explanation of the Spearin legal doctrine made it clear that FirstMark’s attorneys were now engaged and FirstMark was preparing for litigation.

- **January 30, 2019** – FirstMark prolongs the time to correct defective girders by submitting a proposal to construct a costly detour bridge while it performed repair work.

MCC also warned FirstMark, “Anything that could be viewed as actions deliberately increasing the cost of a claim against the Government would be illegal, so let’s be very cautious there.” And, in recognition of FirstMark’s elucidation of the Spearin doctrine wrote, “It is always better to seek additional money by partnering rather than litigation.”⁹³

- **January 30, 2019** – FirstMark continued with the detour bridge proposal, and went on to state, “FirstMark construction is moving forward with both cost and schedule in mind, looking at all possible avenues. But in no way is FirstMark trying to increase cost to a claim, **we are simply doing whatever we can to move forward due to the standpoint the federal highways have taken.**”⁹⁴ Emphasis Added

FirstMark statements that it was “looking at all possible avenues” and “doing whatever we can” was wrong. FirstMark never offered to install temporary bracing as “possible avenue”.

⁹⁰ Exhibit 61 - FHWA Letter dated 1/14/20

⁹¹ Exhibit 62 - Park County letter dated 1/23/20

⁹² Exhibit 63 - FirstMark Letter dated 1/24/20

⁹³ Exhibit 64 - MCC Email dated 1/30/20

⁹⁴ See Exhibit 64 - MCC Email dated 1/30/20

After a meeting was held on February 5, 2020, Pat Kelton of MCC informed FirstMark about conclusion reached which included:

BRACING AND DECK POUR SEQUENCE:

CFL will be sending over examples of bracing and deck pour sequencing that may prevent a reoccurrence of the torsional rotation event that was experienced in the first deck pour. You should review the example bracing designs, and if you agree you can add them into your Steel Erection Plan and submit for approval for use in construction. This shall become FirstMark's proposed bracing plan.

.....

SCHEDULE:

As stated in my email on 1/4/20, our paving schedule shows paving being completed on June 8th, 2020. Construction of the bridge really needs to be to the point we can tie in the asphalt paving to the bridge on or before June 8th, with final completion of all work pertaining to the bridge completed prior to July 1, 2020.

.....

The general consensus by FHWA and MCC is that the actions to correct the girder alignment should progress as early as next week.

It needs to be noted that the date of assessment of Liquidated Damages is still pending, the bridge completion date of November 30th, 2019 is still the enforceable date, so it is very important that we submit an aggressive yet realistic schedule that shows we are doing everything possible to complete the bridge before July 1st, 2020 . . .⁹⁵

With this letter FirstMark was notified, in no uncertain terms, of the consequences that would result if it continued to delay the completion of its work. On February 10, 2020, FirstMark was provided a full explanation of the urgent need to get the bridge bracing plan:

Attached are the last schedule updates sent to the FHWA.

Obviously, they are bridge schedule driven.

Again, once you have your schedule nailed down with the proposed work plans a total project schedule will be created showing the bridge completion and the roadway completion.

Again, the critical date that we will meet on the paving and that we need the bridge to meet is the June 8th paving date.

FHWA is pushing for a total project completion and ribbon cutting before July 4th, 2020.

.....

⁹⁵ Exhibit 65 - MCC Letter dated 2/5/20

I suggest that ANY work that can be done while developing a bracing plan be done. (IE: preparing for highwater flows: disposing of the removed concrete rubble: preparing forms, cleaning beams, and repairing Studs, etc.)⁹⁶ *Emphasis Added*

After receiving the email, FirstMark (apparently unfamiliar with federal work) asked for “bracing examples (Plans?) or pour examples” from the FHWA.⁹⁷ The FHWA provided examples on February 12, 2020.⁹⁸ Another meeting was held on February 27, 2019 to discuss the steps to move the bridge construction along and after the meeting MCC explained:

The big hang up here seems to be that the FHWA has a contract in place to construct the bridge, the contractor (FMC & MCC) allege it cannot be built per design, so we as the contractor need to propose how to build it, submit the info for approval, and build it.

Specifically, this seems to be the bracing issue still. I believe they will allow the top flange bracing but it has to be submitted before they will say yay or nay.

They will not direct work so we must propose how to do it so they can agree or disagree.

We are currently looking at a Non-Performance letter, we need to head that off by taking the aggressive route and saying how we want to construct it and providing a schedule.⁹⁹
Emphasis Added

With this email FirstMark again was told it had to include temporary bracing in its plan. FirstMark responded by telling MCC temporary bracing was a change to the contract:

FirstMark Construction also considers the second option presented by the FHWA, which consisted of **a bracing system utilizing cables and tensioning devices, as a change to the contract.** This system is specific and is not considered an “industry standard.”¹⁰⁰ *Emphasis Added*

What “industry standards” FirstMark was referring to is unclear. More importantly, what FirstMark failed to understand is that “industry standards” do not overrule specific contract requirements - the opposite is the case. FirstMark also argued that AASHTO specifications take precedence over specific contract requirements – again FirstMark interpretation was mistaken – contract specifications rule. In my judgment, the temporary bracing was not a change and that by refusing to install the temporary bracing, FirstMark breached the subcontract Part VII. which required it “To perform and coordinate his

⁹⁶ Exhibit 66 - MCC Email dated 2/10/20

⁹⁷ Exhibit 67 - FirstMark Email dated 2/10/20

⁹⁸ Exhibit 68 - FHWA Email dated 2/12/20

⁹⁹ Exhibit 69 - MCC Email dated 2/27/20

¹⁰⁰ Exhibit 70 – FirstMark Email dated 2/28/20

work with that of the Contractor and other subcontractors to the **best interest of the project as a whole as directed by the Contractor . . .**¹⁰¹ *Emphasis Added*

During late February 2019, it is plain that FirstMark's primary focus was to push its differing site (pile driving) and defective design (girder installation) claims. FirstMark's efforts to set up its claim also went down a level when it wrongly accused MCC of withholding information.¹⁰² Completing the contract bridge work on time certainly did not appear to high on FirstMark's "To-Do List".

By the early March 2020, because of FirstMark's continued failures to meet the contract requirements and dilatory performance, the FHWA and Park County wrote letters to MCC regarding their concerns about the completion of the bridge. At this point MMC's patience with FirstMark had run out. MCC terminated FirstMark subcontract on March 19, 2020. *See Section 4 - Evaluation of Default Termination*

MCC later corrected the defects, performed, and completed the remaining bridge work on July 24, 2020.¹⁰³ This work was completed by recasting the stage one deck on the exact same girders with temporary horizontal bracing (bracing that FirstMark continues to argue would not work). The concrete deck was poured without any girder rotation and misalignment occurring. This fact alone establishes that the FHWA design requirements for temporary bracing were adequate to withstand the weight of the deck when those contract specifications were followed.

VI. Evaluation of FirstMark's TIA Schedules

FirstMark was required to by contract to complete its work by November 30, 2019. But from the beginning FirstMark acted as if the completion date was not important. According to FirstMark April 30, 2017 Schedule it was scheduled to start its pile driving work on June 1, 2020, because of to its mismanagement of submittals, FirstMark did not start its test pile driving until July 31, 2019 – a 61 calendar day (cd) delay.

The delays continued as soon it drove its first test pile on July 31, 2019. As of result of FirstMark failure to provide adequate equipment the Phase I pile driving was not completed until September 17, 2019. According to its revised schedule dated July 29, 2019 this work was supposed to have been completed

¹⁰¹ See *Exhibit 6* - Mountain Construction Company – Standard Subcontract Agreement dated 4/22/19

¹⁰² *Exhibit 71* - FirstMark – MCC Emails dated 2/27/20

¹⁰³ *Exhibit 72* - MCC Schedule Update 03 dated 6/23/20

on July 30, 2019¹⁰⁴ - a 48 cd delay. By September 17, 2019 FirstMark was 109 +/- calendar days behind schedule.

To justify a time extension for the project delays that had occurred, FirstMark submitted its SOUTH FORK ROAD - BRIDGE REPLACEMENT TIA on November 6, 2019. FirstMark submitted a letter and TIA schedule to support its position that the differing site condition extended the completion of its work. FirstMark's letter explained:

Attached is a Time Impact Analysis schedule related to the change in piling driving from Phase 1. We have projected the completion of Phase 2 bridge construction based on the delays of Phase 1 pile driving, included the revised pile driving means and methods, and included allowances for winter weather in Phase 2.

Our schedule shows a revised bridge completion of January 30, 2019, with our demobilization complete following the opening of the bridge.

But there are several problems with FirstMark's so-called TIA. To start with, FirstMark original Baseline start date of April 26, 2019 was forgotten. This allowed FirstMark to ignore the initial 61 cd delay caused by its delayed mobilization and late submittals. Second, the TIA schedule inserted a random list of activities (whether they are contract work or delays activities is unknown) with start and finish dates related to pile driving. The chart on the following page lists the activities included in the TIA schedule, but organizes of activities by start date rather than randomly. Once that was done it was determined the TIA did not justify a time extension to January 30, 2020 for the following reasons:

1. Many of the TIA activities are concurrent and overlap.
2. The total duration from the 7/31/19 start to 9/17/19 finish is 48 cds. Total duration of the added activities that FirstMark inserted into the schedule was 31 cds. Of those 31 cds FirstMark failed to identify what activities it considered to be caused by the differing site condition.
3. There was no activity shown on 17 days. FirstMark would not be entitled to a excusable time extension for those days.
4. FirstMark failed to identify and deduct the days it planned to perform work (i.e. pile driving, 2nd mobilization)

¹⁰⁴ See Exhibit 4 - FirstMark Schedule dated 4/30/17 – Activity A4020 – Drive Pile Bent #2

FIRST MARK - SOUTH FORK ROAD - BRIDGE REPLACEMENT TIA						
Schedule dated 11/6/19						
SUMMARY OF PILE DRIVING ACTIVITES						
#	Act ID	Description	Actual Start	Actual Finis	Duration	Total Duration
1	A3000	BEGIN DRIVING PILE PHASE 1	7/31/2019	7/31/2019	1	
2	A3001	DYNAMIC LOAD TEST PILE DAY 1 - DRIVE PILE TO MIN TIP - MTG IS SCHEDULED	7/31/2019	7/31/2019	1	
3	A3002	CONFERENCE CALL WITH FHWA AND MOUNTAIN - DIRECTION GIVEN TO DRIVE	8/1/2019	8/1/2019	1	
4	A3003	CERTIFIED WELDER SUBMITTAL - WELDER PROCUREMENT	8/1/2019	8/6/2019	6	
5	A3004	DRIVE FIRST 22' ADDITION TO DYANMIC LOAD TEST PILE ABUT 1	8/6/2019	8/6/2019	1	7
		No Activity	8/7/2019	8/7/2019	1	
6	A3005	SPLICE AND DRIVE SECOND 22' ADDITION DYNAMIC LOAD TEST PILE ABUT 1 (8/8/2019	8/8/2019	1	1
		No Activity	8/9/2019	8/11/2019	3	
7	A3006	ADVISED BY FHWA THROUGH MOUNTAIN THAT WE CANNOT USE VIBRATORY	8/12/2019	8/12/2019	1	
8	A3007	ON AUGUST 1ST FHWA ADVISED WE STOP WITH ALL OPERATIONS AT 80' PILE	8/13/2019	8/13/2019	1	
9	A3008	DYNAMIC LOAD TEST PILE ABUT 1 RESTRIKE	8/14/2019	8/14/2019	1	3
		No Activity	8/15/2019	8/18/2019	4	
10	A3009.1	RECIEVED LETTER FROM FHWA THRU MOUNTAIN REQUESTING NEW PILE DRIVIN19G	8/19/2019	8/19/2019	1	
11	A3009.3	NEW IMPACT HAMMER PROCUREMENT	8/19/2019	8/19/2019	1	1
		No Activity	8/20/2019	8/20/2019	1	
12	A3009.2	ADVISED WE CANNOT USE DH-45 AT ABUTMENT 2	8/21/2019	8/21/2019	1	
13	A3009	ADVISED BY FHWA THRU MOUNTAIN WE CAN USE VIBRATORY HAMMER TO ST	8/21/2019	8/22/2019	2	2
		No Activity	8/22/2019	8/24/2019	3	
14	A3009.4	SUBMITTAL FOR WEAP ANALYSIS ON SECOND IMPACT HAMMER	8/25/2019	8/27/2019	3	
15	A3009.5	ADVISED BY FHWA THRU MOUNTAIN THAT WE CAN USE DH45 AT ABUTMENT 2	8/27/2019	8/27/2019	1	
16	A3009.6	SPLICED PILE AT ABUTMENT 2	8/28/2019	8/28/2019	1	4
		No Activity	8/29/2019	9/2/2019	6	
17	A3000.1	MOBILIZE OUTSIDE CRANE TO SITE	9/3/2019	9/4/2019	2	
18	A3009.7	SPLICE REMAINDER OF PILE AT ABUTMENT 2 AND ABUTMENT 1	9/3/2019	9/4/2019	2	
19	A3000.2	DRIVE REMAINDER OF PILE HAND - INCLUDING DYNAMIC LOAD TEST AT ABUT	9/5/2019	9/9/2019	5	
20	A3000.3	ORDERED MORE PILE FOR ENTRE PROJECT- WAITING TIME ON PROCUREMENT	9/10/2019	9/15/2019	6	
21	A3000.14	FINISH DRIVING PILE FOR PHASE 1 ABUT 2	9/16/2019	9/16/2019	1	
22	A3000.4	REMOBILIZE CRANE OUTSIDE CRANE CREW	9/16/2019	9/16/2019	1	
23	A3000.24	FINISH DRIVING PILE FOR PHASE 1 ABUT 1	9/17/2019	9/17/2019	1	13
DURATION					48	
TOTAL ACTIVITY DAYS						31
NO ACTIVITY DAYS					17	

For these reasons, FirstMark's November 6, 2019 TIA does not meet the acceptable TIA standards because failed to segregate the excusable and non-excusable delays and/or identify the actual delays related to the alleged differing site condition. A simply listing of alleged delay activities and inserting them into a schedule, to support a claim the owner is responsible for **all** the delay that occurred from July 31, 2019 to September 17, 2019 does not prove that a contractor is entitled to time extension on FHWA contracts.

FirstMark submitted a subsequent SOUTH FORK ROAD - BRIDGE REPLACEMENT TIA schedule update on January 14, 2020.¹⁰⁵ This TIA schedule also included the above listed pile related activities and then added the girder related activities. This schedule showed that instead of completing the work on January 30, 2020 FirstMark planned to complete the work on June 16, 2020 – roughly 4 ½ months later than the date shown on its November 6, 2020 schedule. As with the November 6, 2019 TIA, the FirstMark January 14, 2020 TIA schedule inserted numerous activities into its schedule which are listed below:

FIRST MARK - SOUTH FORK ROAD - BRIDGE REPLACEMENT TIA					
Schedule dated 1/14/20					
SUMMARY OF GIRDER DEFLECTION ACTIVITES					
#	Act ID	Description	Actual Start	Actual Finish	Duration
1	A4000	Steel Erection Phase 1	10/1/2019	10/4/2019	4
		No Activity	10/5/2019	10/13/2019	9
2	A5000	ERECT FALSE DECK PHASE 1	10/14/2019	10/15/2019	1
3	A5010	ERECT OVERHANG FORMS PHASE 1	10/16/2019	10/17/2019	2
4	A5020	ERECT INTERIOR FORMS PHASE 1	10/18/2019	11/4/2019	18
	A5065	No Activity	11/3/2019	11/11/2019	9
5	A5030	REINFORCE DECK PHASE 1	10/18/2019	11/4/2019	18
6	A5040	POUR DECK PHASE 1 (CONCRETE DELIVERY NOVEMBER 11)	11/12/2019	11/12/2019	1
7	A5050	DECK CURE TIME (14 DAY CURE)	11/12/2019	11/26/2019	15
8	A5060	STRIP DECK FORMS/FALSE DECK PHASE 1	11/19/2019	11/21/2019	3
	A5065	No Activity - Girder Deflection TIA	11/21/2019	1/14/2020	55
		No Activity	1/15/2020	1/19/2020	5
9	A5066	REMOVE PHASE 1 DECK	1/20/2020	2/4/2020	16
10	A5067	GIRDER REALIGNMENT TREATMENT	2/5/2020	2/20/2020	16
11	A5068	No Activity - PERMANENT DESIGN CHANGES	2/21/2020	2/28/2020	8
12	A5069	FORM AND REINFORCE TOP DECK [Replacement Deck]	2/29/2020	3/16/2020	17
DURATION (End of Steel Erection - End of Permanent Design Changes)					180
TOTAL ACTIVITY DAYS					94
NO ACTIVITY DAYS					86

¹⁰⁵ Exhibit 73 – FirstMark TIA Schedule dated 1/14/20

As with the FirstMark's November 6, 2019 TIA, the January 14, 2020 TIA schedule simply added a list of events that was inserted in to the previous TIA schedule. This list pushed out the finish date out to June 16, 2020:. This schedule also fails to support FirstMark's contention that the completion dated should have been extended:

1. The total duration from Steel Erection start on 10/1/19 through the end of start of the 2nd Steel Form and Reinforce Top Deck (the replacement deck) would take 180 days.
2. Total duration of the added construction activities that FirstMark inserted into the schedule was 94 cds. Of those 94 cds FirstMark failed to identify what activities it considered to be contract activities or ones caused by the alleged defective design.
3. On 86 days there was no construction activities shown:
 - There is no explanation for 23 days of no activity
 - 55 days was apparently spent preparing the TIA
 - 8 days was apparently spent after the girders were realigned

Even its defective TIA shows a total 86 cds were not excusable delay days and no time extension is warranted.

FirstMark's January 14, 2019 TIA does not meet the acceptable TIA standards because failed provide any explanation or attempt to segregate the excusable and non-excusable delays and/or identify the actual delays related to the alleged defective bridge design. Furthermore, FirstMark's TIA schedule shows there were numerous days where there was simply nothing going on.

Simply adding a group of activities and inserting them into a so-called TIA schedule, to support a claim that an owner is responsible for total duration of a delay, does not prove that a contractor is entitled to time extension on FHWA contracts. *FP-14 Section 108.03 Determination and Extension of Contract Time* lays out the following requirements for a acceptable TIA:

(a) Definitions.

- (1) Time Impact Analysis.** The procedure by which the Contractor demonstrates the effect of specific time impacts on the overall construction schedule. Time impacts may result in an increase or decrease in contract time.

.....

(2) State the impact that requires a Time Impact Analysis:

- (a) CO proposed or directed Contract Modification;

- (b) Contractor proposed Contract Modification;
- (c) Weather delay; or
- (d) Other Government caused delay.

(3) A copy of the most current approved schedule existing before the impact.

(4) A detailed narrative describing each impact event. Describe impacts to each affected activity in the construction schedule. Include the following:

- (a) Contract clauses under which the request is being made;
- (b) Cause of the impact;
- (c) Start date of the impact;
- (d) Duration of the impact; and
- (e) Methods to be employed to re-sequence or reschedule the work to mitigate the impact. Discuss the feasibility of re-sequencing future work to mitigate delay. Re-sequencing or rescheduling of work will be at no cost to the Government. Include corresponding rationale and assumptions of measures which increase the cost of mitigating the impact.

(5) A revised construction schedule to show the impact of the activities identified, including re-sequencing which would mitigate the delay.

(c) Time extensions. Only delays or modifications that affect critical activities or cause noncritical activities to become critical will be considered for time extensions.

When a Critical Path Method schedule is used, no time extension will be made for delays or modifications that use available float as shown in the most current approved schedule existing before the impact.

No time extension will be made for a claim that states insufficient time was provided in the contract.

FirstMark's TIAs did not meet most of the the above noted requirements, in particular part (4).

Even if it is found the pile driving differing site condition and the girder defective design claims are valid, and FirstMark's TIAs actually met the FP-14 requirments, FirstMark's defective TIA schedules show the maximum time extension FirstMark would have been entilted to would have been 121 calendar days – 31 days for the piles and 86 for the girders.

In my opinion, not only has FirstMark failed to prove there was a pile driving differing site condition and that the FHWA's bridge design was defective, its TIA schedules fell far short of providing the required information needed to identify and justification for exusable delays caused by the alleged claims events.

Comment re VERTEX Report: Mr. McConnell's report includes section VI. *Vertex Schedule Analysis* that starts on page 68. Like FirstMark, Mr. McConnell calls his analysis a Time Impact Analysis. There are a few problems with Mr. McConnell's so-called TIA analysis:

1. Mr. McConnell starts his delay analysis midstream. In a section titled *B. Activities Added to the Baseline Schedule re: Differing Site Condition*. But the schedule he calls the "Baseline" is actually FirstMark's July 29, 2019 Updated Schedule – **not** FirstMark's Baseline Schedule submitted on April 30, 2019. By mischaracterizing the July 29, 2019 Schedule Update as the Baseline, Mr. McConnell was able to ignore FirstMark's initial submittal days that resulted in 61 cds of delay and pushed FirstMark's bridge work onto project critical path.
2. Mr. McConnell followed FirstMark's practice of inserting a laundry list of activities into FirstMark's TIA schedules. Then he simply calculates the duration between the start of the first activity and the finish date of the last added activities to determine the total duration of the delay.
3. Paradoxically, the FirstMark April 30, 2019 Baseline Schedule that shows the planned October 24, 2019 bridge completion, the one that Mr. McConnell ignored previously, is the Baseline schedule he used as the start date for the delay. By using the April 30, 2019 Baseline's October 24, 2019 completion date as the start date and invented September 25, 2020 completion date, Mr. McConnell concludes that FirstMark is entitled 337 day time extension.
4. Then Mr. McConnell goes a step beyond by concluding FirstMark was **not** behind schedule.

The FirstMark and VERTEX TIA schedules do not come close to meeting FHWA TIA standards, or any industry standards for that matter, that are required by contractors to prove delays. As an experienced engineer and consultant, Mr. McConnell has to know that simply listing a collection of "delay" activities and inserting them into a schedule and turning a blind eye to any contractor-caused delays, to support a position that an owner is responsible for all the delays, is absurd.

But Mr. McConnell took his unsupported, one-sided delay analysis one step further. He did this first by mischaracterizing FirstMark's July 29, 2019 update as the "Baseline" which allowed him to overlook FirstMark's initial 61 day mobilization/submittal delay. Then he had the impudence to use the April 30, 2019 Baseline to come up with the October 24, 2019 bridge completion date,¹⁰⁶ rather than use July 29, 2019 Schedule Update completion date of November 7, 2019.¹⁰⁷ With this maneuver Mr. McConnell was able to increase the duration of the delay from 323 cds to 337 cds.

¹⁰⁶ See Exhibit 4 - FirstMark's 4/30/19 Baseline Schedule (Activity # A4999 -Demobilize Structures Equipment) shows the completion of date of 10/14/19 **not** 10/24/19

¹⁰⁷ See Exhibit 16 - FirstMark's 7/29/19 Schedule Update (Activity # A0010 Demobilization) shows a completion of date of 10/14/19 –

After reviewing Mr. McConnell so-called TIA schedule analysis, it becomes obvious that little effort was spent to perform a proper schedule analysis. The TIA failed to identify or segregate excusable and non-excusable delays. This resulted in a failure to account for the 61 day mobilization/submittal delay and the 103 cds that FirstMark schedules showed no contract work was performed. If you add just those 2 periods of delay, there were 164 days of unexcusable delay. So roughly half of the 337 days of delay Mr. McConnell pinned on FHWA or MCC instantly goes out the window. The failure to recognize the 164 cds of delay caused by FirstMark, on its own, invalidates the any conclusions reached in VERTEX Report.

VII. Evaluation of MCC's Termination of FirstMark's Subcontract for Cause

1. Review and Analysis of Events that Led to Termination of FirstMark's Subcontract

From the moment MCC was awarded the contract on April 15, 2019 and FirstMark was sent the subcontract for the bridge subcontract on April 22, 2019, FirstMark failed to diligently proceed with work. FirstMark's lack of urgency started with the delayed signing the subcontract contract. That was followed by late submittals and other required paperwork, so when FirstMark finally showed up to perform its pile driving work it was already **61** cds behind schedule. Then FirstMark started the pile driving work with the wrong equipment. But instead of taking care of the equipment problem to mitigate the delay, FirstMark immediately claimed there was differing site condition.

After contenting there was differing site condition, instead mobilizing adequate equipment, and focusing on completing its pile driving work, then advancing its claim as the contract required, FirstMark decided its time was better spent pursuing its claim and dragging out the pile work. As a result, by the time FirstMark completed the installation of Phase 1 piles on September 17, 2019, FirstMark was an additional **45.5** cds behind schedule. At this point, if you looked at First Mark's Baseline schedule, it was **106.5** cds behind schedule.

With the completion of the Phase 1 pile driving work on September 17, 2019, FirstMark had spent 157 cds, roughly 90% of the 171 cds shown in its Baseline schedule, to complete approximately 20% of the bridge work.¹⁰⁸ Based upon this information it is not hard to understand why MCC and FHWA were concerned about FirstMark's lack of diligence and ability to complete the work.

In my opinion, with the benefit of hindsight, with FirstMark's significantly delayed completion of the Phase 1 pile driving on September 17, 2019, MCC would have been justified and should have notified

¹⁰⁸ See *Exhibit 41* - MCC Pay Estimate Summary - FirstMark Pay Estimate No. 3 dated 9/30/19 shows payment amount of \$319,729.72 – 20% of total subcontract amount \$1,614,566

FirstMark that it was in default of the subcontract. This determination is based on the following FAR provision:

FAR - 52.249-10 Default (Fixed-Price Construction)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will ensure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

And subcontract terms:

- **Subcontract Part II** – [FirstMark] To complete said work within the time or times specified, with the understanding that no extension of time will be recognized by the contractor without the written consent of the Contractor,

WORK TO BEGIN per Schedule of the Contract - WORK TO BE PERFORMED IN SUCH A MANNER AS TO NOT INTERFERE WITH OR DELAY THE PRIME CONTRACTOR SCHEDULE ANY LIQUIDATED DAMAGES RESULTING FROM SUBCONTRACTOR DELAYS WILL BE PAID BY THE SUBCONTRACTOR

- **General Provisions**

A. Upon the occurrence of any one or more of the following events and upon the continuance thereof for a period of 1 days *following* written notice thereof given by certified mail by the Contractor to the Subcontractor, the Contractor may, either through its own employees or through any contractor or subcontractor of its choice, complete the work called for by this Subcontract and/or remedy such defect of material or workmanship, may use or permit any such contractor or subcontractor to use all material and equipment of the Subcontractor on the premises at the date of giving such written notice and may charge to the Subcontractor the entire cost thereof, together with liquidated damages at the rate specified in the General Contract for each day after the completion date specified herein when the work provided for herein is not completed, plus any attorney fees incurred:

A (1) if the Subcontractor shall fail diligently to proceed with or to complete within the time herein specified the work or any part thereof to be done hereunder,
Emphasis Added

Since FirstMark had clearly failed “to prosecute the work or any separable part, with the diligence that will ensure its completion within the time specified”, these contract provisions would have certainly justified MMC termination of FirstMark’s work in mid-September 2019. But obviously MCC did not provide a notice of default and/or its intent to terminate at that time. MCC reluctance to terminate was based on two factors:

- 1) Default termination is an action that could have resulted in negative results for both MCC, the FHWA and FirstMark. As stated in *Administration of Government Contracts 5th Addition – Chapter 10 – Default Termination, Damages and Liquidated Damages*, “A default termination is a traumatic event for both parties. The contractor and the government are both likely to suffer severe economic and time consequences.”¹⁰⁹ For these reasons, MCC had never terminated subcontractor for default on previous contracts and certainly it did not want to break that tradition.
- 2) By the time FirstMark pile driving was completed on September 17, 2019, other project events had occurred resulting in extra work and changes to MCC earthwork. As a result, the FHWA told MCC that its contract time would likely be extended. While MCC September 1st Schedule Update showed bridgework was on the critical path and contractually FirstMark had to complete its bridge work by November 30, 2019. MCC was aware it probably had some leeway with the completion of the bridge.

While FirstMark received the benefit MCC tolerance and the potential extension of MCC’s road work, it continued to delay the work by failing to provide required certification and submittals. On October 22, 2019, the FHWA made it clear they were running out of patience:

One thing they [FHWA] made clear is they expect the bridge to be 100% complete this season [2019], no matter what it takes to deal with the cold weather.

Any extra days allowed for the road work will not apply to the bridge completion schedule. Please be sure your schedule update shows completion in 2019.

But FirstMark apparently did not care about the FHWA’s expectations. When FirstMark’s submitted its TIA Schedule on November 6, 2019, it showed it did not intend to complete the bridge work until January 30, 2019. FirstMark’s defiance of the FHWA’s expectations probably did not sit well. And the events related to the faulty girder installation that occurred afterwards did not improve the situation.

¹⁰⁹ *Administration of Government Contracts 5th Addition – Chapter 10 – Default Termination, Damages and Liquidated Damages, I. Consequences of Default Termination – page 791*

The bridge work suffered a substantial delay after November 9, 2019 deck was poured and FirstMark discovered the girders had defected on November 13, 2019. Then on November 20, 2019 it was found that FirstMark had jumped the gun, when it installed the girders and poured the deck without submitting the required girder erection plan. FirstMark tried to cover its tracks by submitting the plan on November 21, 2019, but it was too late.

By failing to submit the girder erection plan prior to performing the work FirstMark breached the contract requirements to perform the work in “strict accordance with the terms and conditions of the General Contract” in particular *FP-14 - 104.03 Specifications and Drawings*, part (a) General which told FirstMark, **“Do not perform work related to submitted documents or drawings before approval of the CO. Obtain written approval before changing or deviating from the approved drawings.”**

In my opinion, FirstMark’s negligence and contract breach would have justified a default termination of FirstMark’s subcontract when it admitted it had not submitted the girder erection plan on November 21, 2019. But again, for the reasons noted previously, MCC attempted to work with FirstMark instead of terminating the contract for default.

After FirstMark submitted the plan on November 21, 2019, it was subsequently rejected by FHWA in part because the plan did not include that temporary bracing that would have likely prevented the girder deflection in the first place. FirstMark’s negligence prevented it from receiving benefit of having an accepted girder erection plan that would have likely prevented the next 4 months of delay from occurring.

As it had with the pile driving delay, FirstMark was quick to blame the FHWA and MCC, as a way redirect attention from its failure to adhere to the contract specifications. Instead of correcting the girder deflection problem and completing its contract work, during the next 4 months FirstMark largely suspended its corrective and construction work, this delay began by wasting 55 days between November 21, 2019 to January 14, 2020 to prepare its TIA schedule¹¹⁰ - this was not an excusable delay.

¹¹⁰ See *Exhibit 72* - FirstMark TIA Schedule dated 1/14/20

From the time it prematurely poured the Phase 1 deck, FirstMark breached the contract by ignoring *FP-14 - 103.02 Disputes* which required FirstMark to adhere to FAR Clause 52.233-1 Disputes (Alternate I):

FAR 52.233-1 Disputes. Alternate I (Dec 1991). As prescribed in 33.215, substitute the following paragraph (i) for paragraph (i) of the basic clause:

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer. Emphasis Added

By mid-February 2020, FirstMark continued to breach the contract by failing to diligently proceed with the work and its refusal to comply with FHWA decision to include temporary bracing in its girder erection plans. On February 13, 2020, MCC's attorney, notified FirstMark that it had to provide a "plan and schedule to demonstrate that the project will be ready for asphalt placement to the bridge no later than June 8, 2020" and "be off the project completely no later than July 3, 2020."¹¹¹

FirstMark's attorney, Holland & Hart on February 21, 2020 responded to, "Mountain's demand that FirstMark demonstrate that the Project will be ready for asphalt placement no later than June 8, 2020, and that FirstMark will be off the Project by July 3, 2020." The letter listed 2 options:

Option 1 (Acceleration) – Detour Bridge and Full Bridge Construction

.....

Option 1 has an estimated completion date of July 3, 2020, see Exhibit F, and an additional rough order of magnitude cost ("ROM") of \$700,000 to \$900,000, subject to FirstMark's continuing investigation and analysis of these issues.

Option 2 (Non-Acceleration) – Girder Repair, Permanent Bracing and/or Revised Concrete Placement Sequence

.....

Option 2 has an estimated completion date of October 14, 2020, see Exhibit G, and an additional ROM of \$400,000 to \$600,000, subject to FirstMark's continuing investigation and analysis of these issues. FirstMark reserves its right to supplement this ROM.¹¹²

The February 21, 2020 Holland & Hart letter did not provide a schedule to show exactly how FirstMark planned to complete the work. *Option 1*. And *Option 2* was **not** a response since showed an October 14, 2020 completion date which was well beyond July 3, 2020 and payment of FirstMark disputed claims.

After a meeting held on February 26, 2020, MCC informed FirstMark the Holland & Hart letter did not meet the contract requirements and told FirstMark:

¹¹¹ Exhibit 73 - Darrah Letter date February 13, 2019

¹¹² Exhibit 74 - MMC Email dated 2/27/19 with attached redacted Holland & Hart response letter

If you want information submitted to FHWA it needs to be sent to me in the proper format, IE: a submittal with pertinent information and a request it be submitted and why, considering it is outside the contract scope.

I will not assume you want information submitted.¹¹³

FirstMark did not respond, but afterwards, MCC did forward the Holland & Hart letter telling FHWA that:

Please see attached, these are the two options they are referencing, **which they so far have not submitted properly.**

They are insisting on direction as to which option to pursue before they proceed.

To me this constitutes directing their work.

What is your take on this?

I have already told them they have direction in so far as there is an existing contract in place.¹¹⁴

By the end of February 2020, with no formal submittal received, MCC again asked FirstMark to “Please reply to this with a plan of action and schedule. Or state FirstMark’s position on whether you will be willing taking action to correct the non-compliance issue.”¹¹⁵ The only plans or schedule received from FirstMark was 4-Week Look Ahead schedule on March 11, 2020,¹¹⁶ and 3-Week Look Ahead Schedule on March 14, 2019.

Comment re VERTEX Report: On page 14 of his report, Mr. McConnell contends that, “FirstMark’s February 21, 2021 schedule submission met the terms of MCC’s request, so it cured this issue.” Mr. McConnell did not provide a copy of the referenced February 21, 2021 Schedule to support his position and the referenced schedule has not been found in the project records provided. It is understood MCC’s attorney has submitted a *Request for Production* requesting a copy of the February 21, 2021 Schedule. If that schedule is produced, I hereby reserve the right to revise my report. If the schedule is not provided, Mr. McConnell’s statement that FirstMark “cured this issue” is false.

By mid-March 2019, despite having only completed 25% of the bridge work¹¹⁷ and having been paid 44% of its original contract amount,¹¹⁸ FirstMark’s work had gone 150 cds beyond its original October 14, 2019 bridge completion date shown on its April 30, 2019 Baseline schedule. It is no surprise that due to

¹¹³ Exhibit 75 - MCC Email dated 2/26/20

¹¹⁴ Exhibit 76 - MCC Email dated 2/27/20

¹¹⁵ Exhibit 77 - MCC Email dated 2/28/20

¹¹⁶ Exhibit 78 - MCC Email dated 3/11/20

¹¹⁷ FirstMark had only completed the Phase 1 pile driving work and concrete work estimated to be 25% of its work

¹¹⁸ See *Exhibit 41* - MCC- FirstMark Pay Estimate Summary shows FirstMark was paid \$711,498 this was 44% of its original contract amount of \$1,614,566.

FirstMark's gross lack of diligence - with no end in sight, coupled with FirstMark's continued resistance to follow the contract requirements the FHWA, Park County and MCC 's had patience ran out.

On March 19, 2020, the FHWA, Park County wrote letters expressing serious concerns regarding FirstMark's continued contract breaches and ability to complete the work. On March FHWA wrote:

FHWA's concerns are specifically directed to the lack of responsibility, responsiveness, and cooperation of MCC and bridge subcontractors, **most specifically the subcontractor FirstMark Construction (FMC), through this process. It has been nearly 4 months since the discovery of the non-compliance issue: however, less than 3 weeks of on-site work has been completed.**

MMC having also runout patience on March 19, 2020 terminated FirstMark's contract tell them:

Mountain Construction Company invokes Subsection A of the General Provisions and provides FirstMark with notice that it has no choice but to take over the work FirstMark has failed to properly and timely perform.

MCC's letter was effectively its terminated letter. This is because the first notice of default notice of default and possible termination had been sent a month earlier on February 13, 2020, when MCC's thru its attorney, told FirstMark:

1. FirstMark shall provide a plan and schedule to demonstrate that the project will be ready for asphalt placement to the bridge no later than June 8, 2020.
-
2. FirstMark shall provide a plan and schedule that it will be reasonably calculated to demonstrate that it will be off the project completely on or before July 3, 2020.

MMC's February 13, 2020 letter then notified FirstMark that, "If FirstMark cannot meet the reasonable requirements imposed in this letter, it is possible that the Federal Highway Administration will take over the bridge work." With this letter there is no question that FirstMark was placed on notice and it faced termination if it did not provide assurance, it could complete the bridge would be completed before June 8, 2020. FirstMark was given plenty of time to cure its default.

2. Conclusions regarding MCC Default Termination of FirstMark's Subcontract

From my review of the events and facts of this project, from the start FirstMark failed to "diligently to proceed with or to complete within the time herein specified the work or any part thereof". By mid-September 2019, when FirstMark had used 90% of the contract time to complete 20% of the work, MCC would have been justified terminating FirstMark for default. Instead of termination, MCC attempted to work with FirstMark to complete the bridge work.

After September 2019, when it came time to install the girders, another one of FirstMark shortcuts that backfired. First by neglecting to submit the girder erection plan, then by failing to install required temporary bracing. As it turned out, if FirstMark had timely submitted the girder erection plan for acceptance before it set the girders, it would have been prevented from proceeding with the girder work because the FHWA would not have allowed the work to proceed without temporary bracing.

With girders FirstMark breached the contract twice – first when it neglected to submit the girder erection plan before installation and a second time when it went ahead and installed the girders without an accepted plan. These breaches would have justified the termination of FirstMark’s contract in mid – November 2019. Again, MCC decided to press on and attempted assist FirstMark in effort to get the bridge work completed.

After the girder erection disaster, instead of quickly coming up with a solution to correct the girder issue, FirstMark drug its feet, pushing fictional defective design claim and wasting 55 days to prepare TIA schedule to support its delay claim. FirstMark fell further behind schedule. By mid-February 2020 with little progress and no plan or schedule of completion forthcoming, MCC notified FirstMark that if an acceptable plan and schedule were not received, it would be terminated and FHWA would take over the work.

For a month FirstMark disregarded the notice and appeared would not comply with the FHWA’s requests. With time running out to complete the bridge and the FHWA requiring MCC to complete the work by July 4th, MCC could no longer avoid terminating FirstMark’s contract and taking over the bridge work.

Unlike Mr. McConnell’s experience “with thousands of contract terminations on construction projects around the globe”, in my 30 + years of experience on projects in western United States, termination for default rarely occurs - the downside is too far great for all the parties and parties typically take any action necessary to avert terminating or being terminated. In my opinion, the project records show MCC made a good faith effort to assist FirstMark and avoid the termination FirstMark’s contract. FirstMark failed to comply with contract and made little effort to work with MCC and FHWA to work through problems and complete the bridge. From the start of its work, FirstMark’s efforts were largely focused

on pursuing its claims. In my opinion by mid – March 2020, MCC was left with little choice but to terminate FirstMark’s subcontract for default.

FirstMark and VERTEX have failed to prove that FirstMark is entitled to any time extension and it is certainly not entitled to recover any cost caused by its own failures to manage and diligently pursue the work.

MCC default termination FirstMark was justified. Consequently, MCC is entitled to be reimbursed for the cost to completed FirstMark’s work as well as project delay cost caused by FirstMark’s delays. (See *Section 5 - Evaluation of MCC Cost and Damage Calculations*), work that MCC completed per the contract plans and specifications on August 19, 2020.¹¹⁹

Comments re VERTEX Report: FirstMark’s expert, Mr. McConnell, acknowledged that FirstMark’s termination was based upon two (2) provisions of the Subcontract:

A (1) if the Subcontractor shall fall diligently to proceed with or lo complete within the lime herein specified the work or any part thereof to be done hereunder,

.....

A (3) or if the Subcontractor shall fail to remedy any defect of material or workmanship furnished by him when and as required by the Contractor.

But on page 13 and 79 of the VERTEX Report, Mr. McConnell takes the position that MCC termination for default was “procedurally and substantively flawed” to conclude that the termination was a termination for convenience. This conclusion is largely based upon his position that MCC did not strictly adhere to the contract cure notice requirements. There are 2 major problems with this position:

1. From the start, FirstMark consistently failed to strictly adhere to contract provisions, i.e. late submittals, threats to stop work if the FHWA did not recognize its claims, failure to diligently proceed with the work, failure to timely respond to request to provide backup information, etc. By failing to strictly meet the contract requirements, FirstMark waived its ability to strictly impose the contract procedures on MCC. Moreover, FirstMark was not prejudiced by an alleged defective notice, the record is clear that FirstMark was repeatedly told and knew it was violating the contract terms. FirstMark had to know its continued failures to comply with the contract would result in termination.
2. As discussed, FirstMark was put on notice on February 13, 2019 that its delays would result in its work being taken over and it needed to provide plans and schedule that showed how it would

¹¹⁹ Exhibit 80 - MCC Daily Reports dated 7/23/20 – 9/3/20

complete the bridge work by July 3, 2020. FirstMark failed to provide was given more than a month to comply before it was terminated for default.

On page 14 of the VERTEC Report, Mr. McConnell maintains that “FirstMark’s February 21, 2021 schedule submission met the terms of MCC’s request, so it cured this issue.” Mr. McConnell did **not** provide a copy of the referenced February 21, 2021 schedule to support his position.

The only February 21, 2021 document relates to a schedule is the February 21, 2021 schedule Holland & Hart dated letter, as discussed previously, this letter was **not** a schedule. To-date the schedule Mr. McConnell relies upon has not been located in the project records provided. It is understood that MCC’s attorney has submitted a Request for Production that includes a specific request that FirstMark produce the February 21, 2021 schedule that Mr. McConnell referenced. If this schedule is produced, I reserve the right to revise my report. If the schedule is not provided, Mr. McConnell’s statement that FirstMark “cured this issue” is false.

In conclusion, because Mr. McConnell has ignored critical information, overlooked FirstMark’s caused delays, unsuccessful shortcuts and contract breaches, makes his report and schedule analysis one-sided and misleading. Consequently, the VERTEX Report does not meet the standards needed to prove FirstMark is entitled to any time extension or that MCC’s termination was for convenience.

VIII. Evaluation of MCC Cost and Damage Calculations

As a result of FirstMark’s default that resulted in the termination of its subcontract on March 19, 2020, MCC took over the completion of the remaining bridge work. CC& G Inc was subcontracted to assist MCC with the completion of the bridge on March 27, 2020.¹²⁰ MCC also employed other subcontractors to complete the bridge.

MCC and CC & G completed the bridge work by following those plans and specifications. The bridge was successfully constructed by following the original plans and specifications which included the use of temporary bracing. MCC completed the remaining bridge work was completed on August 19, 2020. This fact alone debunks the FirstMark and its expert’s contention that the FHWA plans, and specifications were defective.

¹²⁰ Exhibit 79 - CC& G Inc. Subcontract dated 3/27/20

To repair and complete FirstMark's bridge work, MCC incurred \$ 733,155 to complete the bridge. This cost is broken down as follows:

1. MCC Additional Cost to Complete FirstMark's Work – Total \$ 576,552

MCC paid FirstMark \$713,098 to partial complete the work. After FirstMark termination for default, MCC paid a total \$1,402,808 to repair and complete the bridge work FirstMark was contracted to perform. FirstMark subcontract amount was \$1,614,566. MCC total direct cost to repair and complete bridge was \$2,327,654. defective work. MCC added direct cost to complete the work FirstMark was contracted to complete the work is **\$501,350**.

MCC is entitled to payment for its overhead and profit for the added work. The industry standard 15% Markup for OH&P for has been applied to the **\$501,350** added direct cost. MCC is entitled the **\$75,202** for its overhead and profit.

As a result of FirstMark's contract default, FirstMark is required to re reimburse MCC for the direct cost and markup to complete the bridgework it was contracted to perform in the amount of **\$ 576,522**.

2. Bridge Delay Cost – Total \$130,000

As a result of FirstMark's default, MCC the completion of the project was extended by 25 cds.

According to MCC's Project Daily Report dated July 24, 2020 states, "Crews finished the turnout and approach paving. Only paving remaining is the tie ins to the bridge." After July 24, 2020, the completion of bridge work delayed the completion of the project. MCC Project Daily Report show the bridgework was finally completed on August 19, 2020, "CC&G Finish the bridge. Just some minor mob out items left."¹²¹

The completion of all the work was noted MCC Project Daily Report dated August 31, 2020 it was noted "Crew onsite picking up trash. S & L installed the last 2 signs" and on September 3. 2020 it was reported that project was officially completed, "Ribbon Cutting Ceremony, good turnout and response."¹²²

¹²¹ See Exhibit 80 - MCC Daily Reports dated 7/23/20 – 9/3/20

¹²² See Exhibit 80 - MCC Daily Reports dated 7/23/20 – 9/3/20

FirstMark was supposed to complete of the bridge on October 14, 2019. The actual completion took an additional 310 cds. The Subcontract General Provisions state in part

. [Contractor] may charge to the Subcontractor the entire cost thereof, together with liquidated damages **at the rate specified in the General Contract for each day after the completion date specified herein when the work provided for herein is not completed, plus any attorney fees incurred:**

While the subcontract terms allow MMC to charge LDs starting the day after FirstMark's March 19, 2020 termination, because MCC was performing road work until July 24, 2020, and completion of bridge work alone extended the completion of project from the period from July 25, 2019 thru August 19, 2020. Therefore, MCC is justified to charge FirstMark LDs as specified by *FP-14 Section 108.04 Failure to Complete Work on Time – Table 108.1* for 25 days of critical path delay. At the LD rate of \$5200 per day, MCC is entitled to be paid **\$130,000** for the 25-day delay caused by FirstMark's default.

IX. Other Reimbursement Cost - To be Determined

1. Attorney Fees - To Be Determined

The Subcontract General Provisions – Part A allows MCC to be reimbursed for its attorney fees.

2. Unpaid Taxes – To Be Determined

It is also expected, that MCC will be required to pay a Wyoming Department of Revenue Tax Lien in the amount of \$26,563.15 as a result of unpaid taxes plus interest associated with FirstMark subcontract

Based upon this preliminary evaluation, it is concluded that MCC is entitled to the added cost to complete FirstMark's work in the total amount of **\$733,115**.

See following Summary of Added Cost & Damages to Mountain Construction Company

Summary of Added Cost & Damages to Mountain Construction Company		
Firstmark Construction v Mountain Construction		
Costs to Repair and Complete Bridge:	Amounts	
Direct Costs paid to repair and complete bridge		\$1,402,808
Period: 3/20/19 - 9/3/19		
Less: remaining on Firstmark's Contract		
Firstmark's contract value	1,614,556	
Less: Paid to Firstmark	713,098	
Remaining on Firstmark Contract		\$901,458
Costs on bridge in excess of Firstmark's contract		\$501,350
OH & P Markup @ 15%		\$75,202
Total Added Direct Cost w/Markup		\$576,552
Delay Damages		
Calendar days of delay	25	
7/25/		
LD Rate per Contract reference to FP-14	\$ 5,200	
Total Delay Damages		\$130,000
Unpaid Wyoming Taxes - Estimated		\$26,563
Attorney's Fees		TBD
Total Due from Firstmark		\$733,115

Construction Analysis expressly reserves the right to supplement and/or revise this Preliminary Expert Report including the analysis of the added cost and damages in the event further information is provided.

Signed Stephen Sullivan

Date 5/27/2021

Stephen P Sullivan – Construction Analysis

Preliminary Expert Report and Cost Analysis Regarding the Construction Dispute between Mountain Construction Company and FirstMark Construction

Project: Contract No. 6982AF19C000013 dated 4/15/2019, for the construction of WY FLAP 6WX(1), Southfork Road Project

Project Location: Shoshone National Forest, Park County, Wyoming

Owner: Federal Highway Administration – Central Highway Division

General Contractor: Mountain Construction Company

Subcontractor: FirstMark Construction, LLC

Expert Report Prepared by Stephen Sullivan – Construction Analysis - Construction Claims Consultant

EXHIBIT INDEX

- Exhibit 1 - Stephen Sullivan Professional Resume/CV
- Exhibit 1.1 - Bid Opening Summary dated 3/29/19
- Exhibit 2 - FHWA Letter dated 4/22/19 – Notice to Proceed
- Exhibit 3 – MCC Daily Report dated 4/30/19
- Exhibit 4 - FirstMark Schedule dated 4/30/19
- Exhibit 5 - MCC Submittal-029 Project Schedule dated 6/13/19
- Exhibit 6 - Mountain Construction Company – Standard Subcontract Agreement dated 4/22/19
- Exhibit 7 - FirstMark – MCC email dated 5/9/19
- Exhibit 8 - FirstMark April 30, 2019 Schedule
- Exhibit 9 - FirstMark email dated 6/24/19
- Exhibit 10 - FirstMark – MCC Email dated 10/10/19
- Exhibit 11 - MCC email dated 6/28/19
- Exhibit 12 - FirstMark – MCC Email dated 7/17/19
- Exhibit 13 - FHWA Letter of Transmittal dated 7/23/19
- Exhibit 14 - MCC email dated 7/16/19
- Exhibit 15 - FirstMark – MCC Emails date 7/26/19
- Exhibit 16 - FirstMark Email and schedule dated 7/29/19
- Exhibit 17 - MCC Schedule Updated No. 1 dated 9/2/19
- Exhibit 18 - FirstMark Email and Late Crane Arrival dated 7/18/19
- Exhibit 19 - FirstMark Email and Pile Driving Plan dated 7/22/19
- Exhibit 20 - MCC mail dated 7/27/19
- Exhibit 21 - FirstMark email and RFI No. 6 dated 7/24/19
- Exhibit 22 - FirstMark email w/Daily Reports dated 8/22/19
- Exhibit 23 - FirstMark Email re Notice of Differing Site Condition dated 7/31/19
- Exhibit 24 - FirstMark email dated 8/1/19
- Exhibit 25 - FirstMark email dated 8/5/19

- Exhibit 26 - FirstMark email dated 8/8/19 w/test reports
- Exhibit 27 - MCC email dated 8/12/19
- Exhibit 28 - FirstMark email dated 8/13/19
- Exhibit 29 - MCC Project Daily Report dated 8/13/19
- Exhibit 30 - MCC Email and FHWA letter dated 8/19/19
- Exhibit 31 - FirstMark email dated 8/26/19 and letter dated August 21, 2019
- Exhibit 32 - FirstMark Email and RFI # 9 dated 8/22/19
- Exhibit 33 - FirstMark Email and RFI # 10 dated 8/22/19
- Exhibit 34 - FHWA Email dated 8/27/19
- Exhibit 35 - MCC & FirstMark emails dated 9/3/19
- Exhibit 36 - MCC Email dated 2/3/20 w/FirstMark cost calculations
- Exhibit 37 - MCC Email dated 9/6/19
- Exhibit 38 - First Mark TIA Schedule submitted on 12/2/19
- Exhibit 39 - FirstMark letter date 2/13/20
- Exhibit 40 - MCC email dated 2/26/20 w/Attached FirstMark and FHWA Correspondence
- Exhibit 41 - MCC Subcontract Pay Estimate Report – Period 7/31/19 – 11/30/19
- Exhibit 42 - FirstMark Email dated 9/28/19 with CMG Daily Report dated 9/17/19
- Exhibit 43 - FirstMark Email with 5-Week Look Ahead Schedule dated 9/19/19
- Exhibit 44 - FirstMark Email dated 10/18/19 with CMG Daily Report dated 10/5/19
- Exhibit 45 - MMC Email dated 10/22/19
- Exhibit 46- FirstMark Email and TIA Schedule dated 11/6/19
- Exhibit 47 - MMC Email and Form 470 – Notification of Completion of Work dated 11/9/19
- Exhibit 48 - FirstMark Email dated 11/13/19
- Exhibit 49 - FirstMark Email dated 11/20/19
- Exhibit 50 - FirstMark Email dated 11/21/19 rework shutdown
- Exhibit 51 - November 21, 2019 – FirstMark Email re No Girder Erection Plan
- Exhibit 52 - FHWA letter re Girder erection plan – Returned for Corrections dated 12/17/19
- Exhibit 53 - Park County Email dated 11/29/19
- Exhibit 54 - FirstMark Letter dated 12/2/19
- Exhibit 55 - MCC Email w/Meeting Minutes dated 12/6/19
- Exhibit 56 - MCC Email dated 11/29/19 with FHWA 10/28/19 letter
- Exhibit 57 - FirstMark Letter dated 11/25/19
- Exhibit 58- FirstMark Email and Notice dated 12/11/19
- Exhibit 59 - FHAW letter dated 12/17/19
- Exhibit 60 - Park County letter dated 1/15/20
- Exhibit 61 - FHWA Letter dated 1/14/20
- Exhibit 62 - Park County letter dated 1/23/20
- Exhibit 63 - FirstMark Letter dated 1/24/20
- Exhibit 64 - MCC Email dated 1/30/20
- Exhibit 65 - MCC Letter dated 2/5/20

- Exhibit 66 - MCC Email dated 2/10/20
- Exhibit 67 - FirstMark Email dated 2/10/20
- Exhibit 68 - FHWA Email dated 2/12/20
- Exhibit 69 - MCC Email dated 2/27/20
- Exhibit 70 – FirstMark Email dated 2/28/20
- Exhibit 71 - FirstMark – MCC Emails dated 2/27/20
- Exhibit 72 - MCC Schedule Update 03 dated 6/23/20
- Exhibit 73 – FirstMark TIA Schedule dated 1/14/20
- Exhibit 73 - Darrah Letter date February 13, 2019
- Exhibit 74 - MMC Email dated 2/27/19 with attached redacted Holland & Hart response letter
- Exhibit 75 - MCC Email dated 2/26/20
- Exhibit 76 - MCC Email dated 2/27/20
- Exhibit 77 - MCC Email dated 2/28/20
- Exhibit 78 - MCC Email dated 3/11/20
- Exhibit 79 - CC& G Inc. Subcontract dated 3/27/20
- Exhibit 80 - MCC Daily Reports dated 7/23/20 – 9/3/20
- Exhibit 81 – Summary of MMC Added Cost and Damages